Library Update: Chemistry Information Seeking in an AI-driven World

Ian Gordon, Brock Library Teaching & Learning Librarian

Brock University

An update about the library, databases, and strategies to remain current. This will involve gaining feedback on AI-assisted resources, SciFinder-n, Reaxys and other text- and chemistry-based open and proprietary resources.

https://www.dreamstime.com/

The information literate person can:

Information

https://aau.ac.ae/en/blog/ten-signs-to-know-if-you-are-information-literate

Agenda

What’s new in the library
Databases – lots of them
AI-driven innovation
Where, how and when to get help!

https://www.dreamstime.com/

Agenda

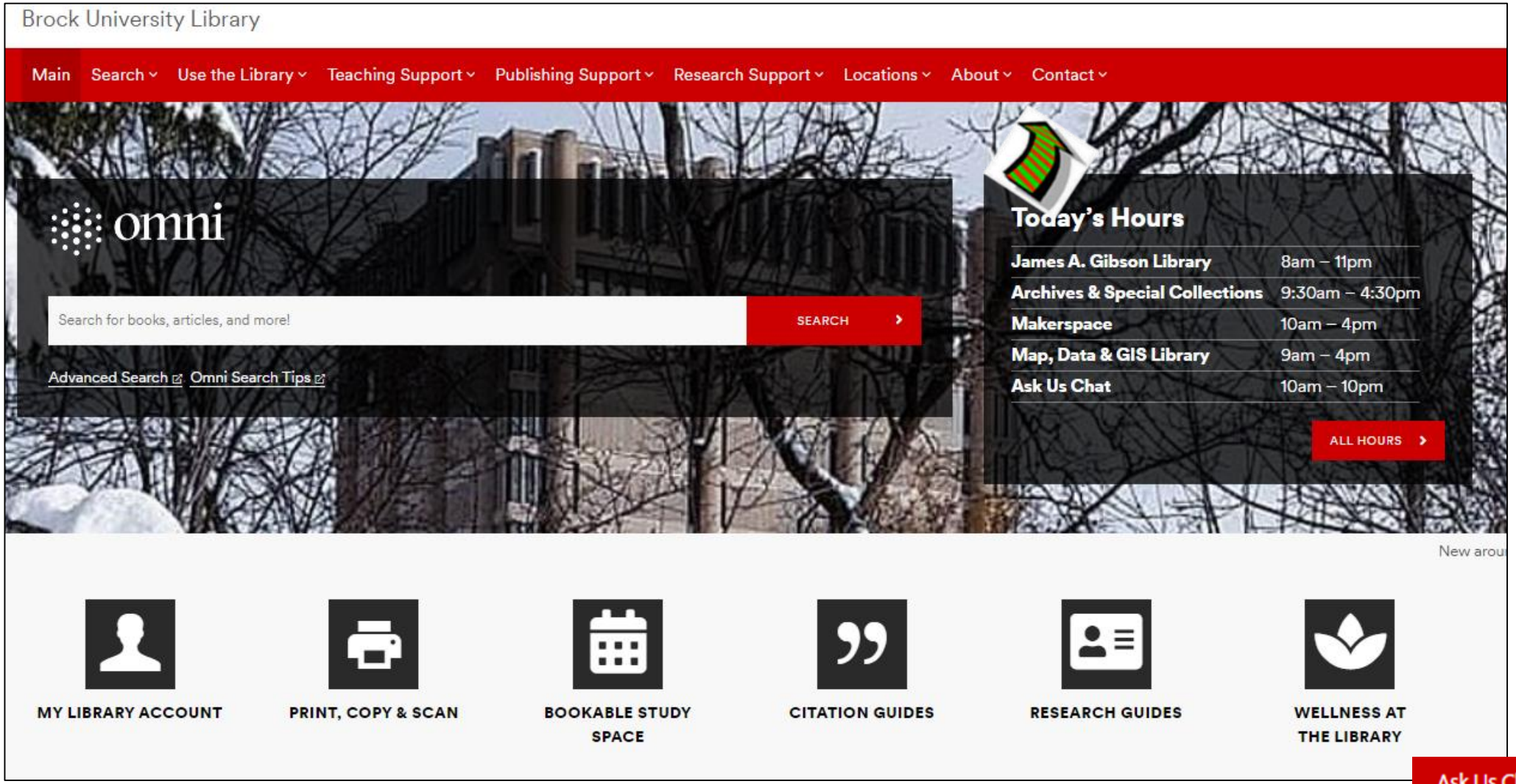
What's new in the library
Databases – lots of them
AI-driven innovation
Where, how and when to get help!

https://www.dreamstime.com/

https://brocku.ca/library/spaces/graduate-students/

Library 6th Floor Grad study room and bookable group study/presentation space

https://brocku.ca/library/



Librarian Profiles

ADMIN TEAM

NICOLE NOLAN

Interim University Librarian

ANDREW COLGONI

Associate University Librarian, Student Success

MONICA RETTIG

Acting, Associate University Librarian, Research

PROFESSIONAL LIBRARIANS A-Z

KYMBERLY ASH

Teaching & Learning Librarian

JUSTINE COTTON

Teaching & Learning Librarian

MANDY DEANS KASSIES

Collections Librarian

SONIA DHALIWAL

Digital Scholarship/Special Projects Librarian

JOHN DINGLE

Metadata Librarian

IAN GORDON

Teaching & Learning Librarian

Ian Gordon

Teaching & Learning Librarian (Librarian III)

Applied Health Sciences, Mathematics & Science

Ian Gordon (he/him/his)

Library Department: Teaching & Learning

Office: Schmon Tower 1137
Phone: 905 688 5550 x3727
Email: igordon@brocku.ca

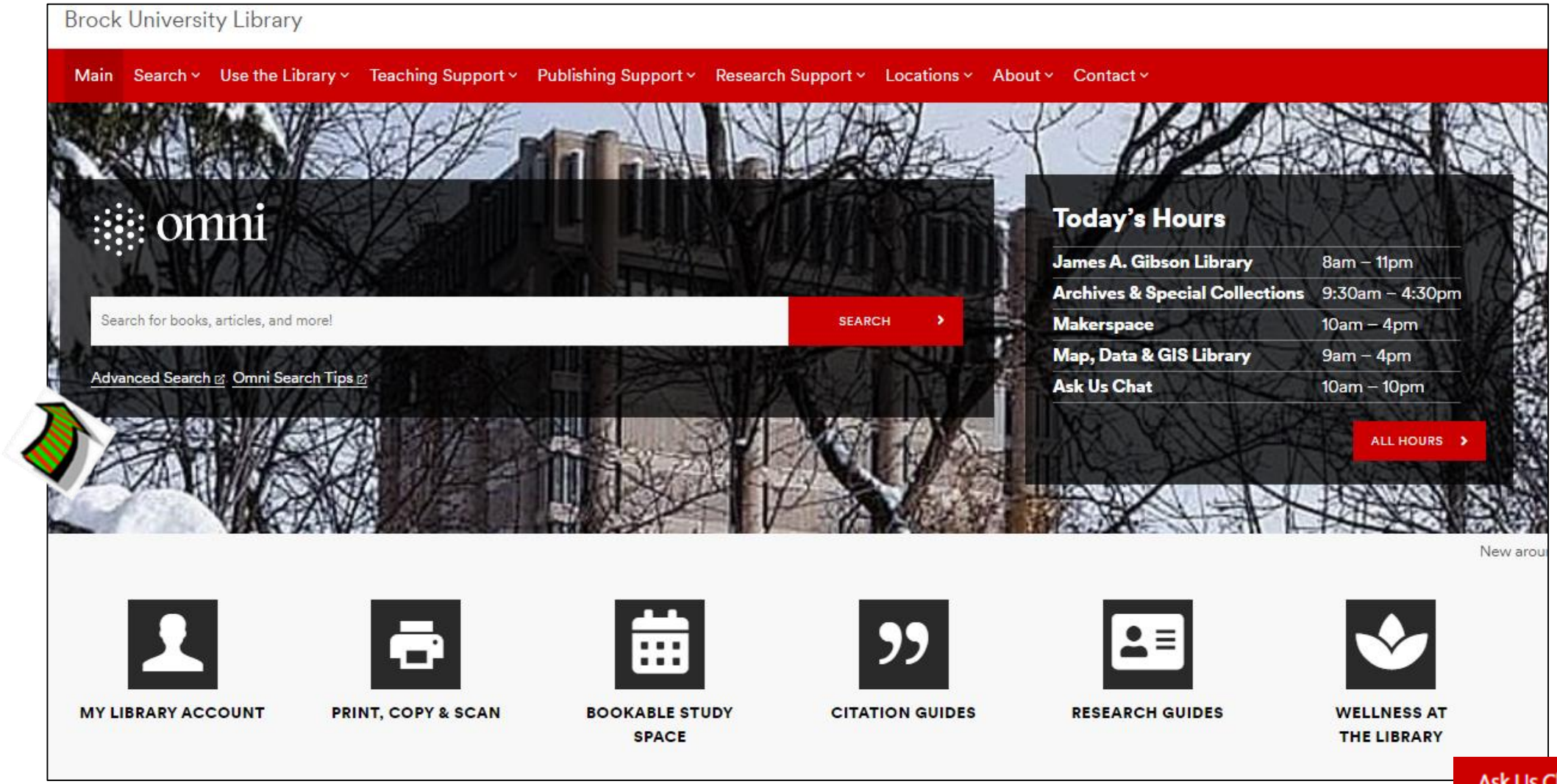
Book a Consultation

Ian Gordon is a member of the Brock Library Teaching & Learning Team. Ian's interests include STEM teaching, information seeking, and providing one-on-one assistance for the Faculty of Mathematics and Science, Faculty of Applied Health Sciences, and all points in between. Book a research consultation to work through an idea, get help searching the literature, exploring an idea, or learn something new together.

Publications and collections

- Ian D. Gordon ORCiD database record @ https://orcid.org/0000-0003-1128-3301
- Vamos, S., Vine, M., Alaimo, D., & Gordon, I. D. (2024). Health literacy in patient-physician communications: A scoping review. *Health Behavior and Policy Review*. (in press)
- Gordon, I. D. (2023, June 14). Subject Librarianship vs Functional Teams in Academic Libraries. *InsideOCULA Open* Shelf. https://open-shelf.ca/subject-librarianship-vs-functional-teams-in-academic-libraries-questions-to-ask/
- Gordon, I. D., Galbraith, B. J., & Savino, C. Defining 'cool climate" research: A bibliographic analysis. (2022) *ICCWS Symposium* Poster, Brock University, co-presenter, July 17-21, 2022. https://archive.org/details/gordon-galbraith-savino-defining-cool-climate-research-a-bibliographic-analysis-/mode/1up
- Gordon, I. D., Chaves, D., Dearborn, D., Hendrix, S., Hoffmann, K., Hutchinson, R., Popovich, C., & White, M. (2022). Information seeking behaviors, attitudes, and choices of academic physicists. *Science & Technology Libraries*. doi:10.1080/0194262X.2021.1991546

https://brocku.ca/library/



NEW SEARCH | JOURNAL SEARCH | BROWSE | DATABASE SEARCH | INTERLIBRARY LOAN | RESEARCH GUIDES | ... | Sign in

SEARCH CRITERIA

SIMPLE SEARCH

Search within: Brock Library + Omni Libraries | Brock Library | New Books | Archives & Special Collections

Search fields

Any field | contains | Enter a search terms for row

AND | Any field | contains | Enter a search terms for row

+ ADD A NEW ROW CLEAR

Resource Type

All items

Language

Any language

Start Date:

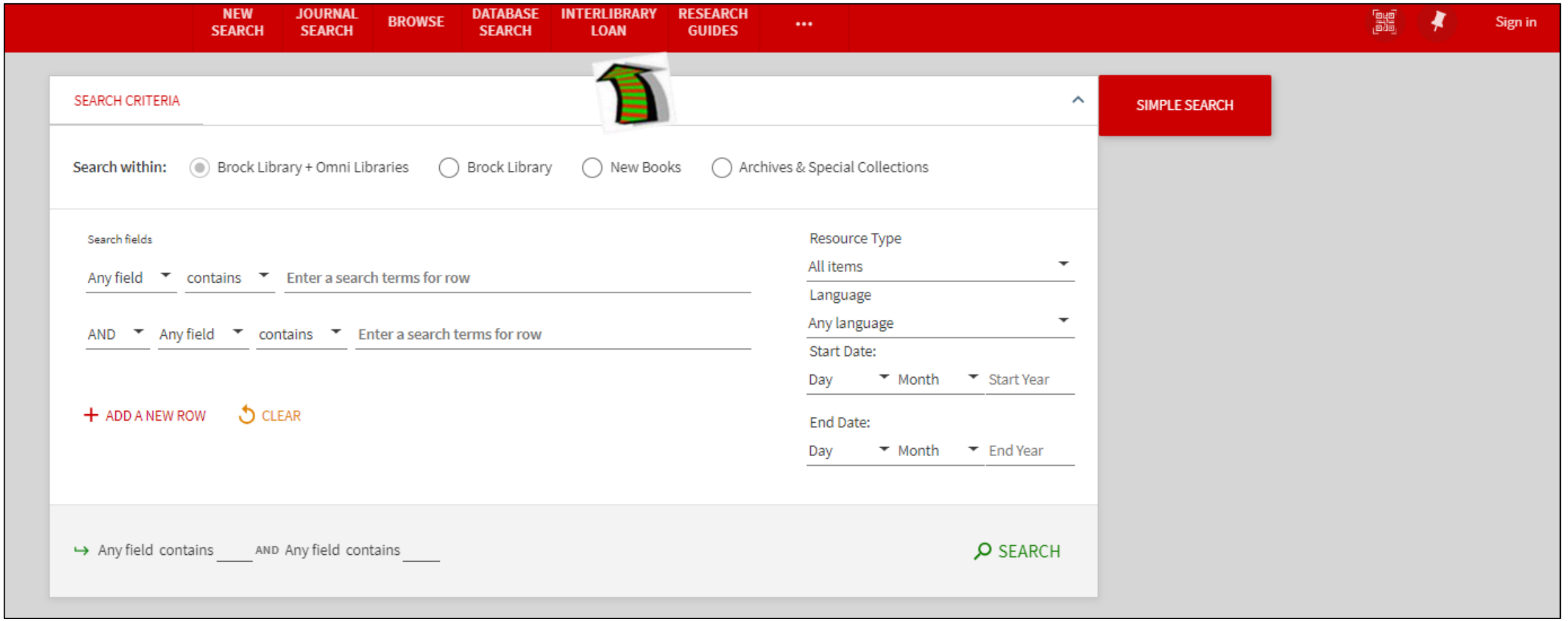
Day | Month | Start Year

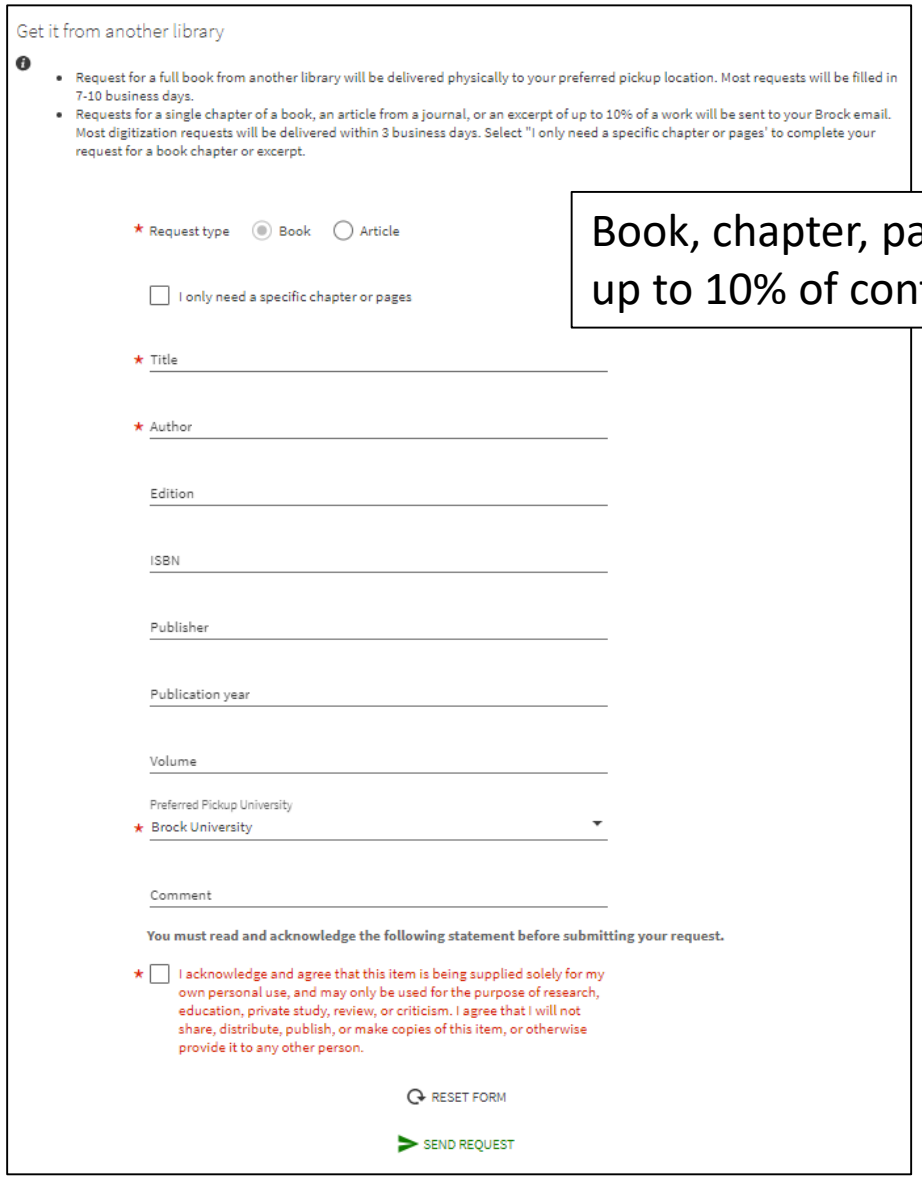
End Date:

Day | Month | End Year

↪ Any field contains ____ AND Any field contains ____

SEARCH


NEW SEARCH
JOURNAL SEARCH
BROWSE
DATABASE SEARCH
INTERLIBRARY LOAN
RESEARCH GUIDES
...
Sign in
SEARCH CRITERIA
SIMPLE SEARCH
Search within:
Brock Library + Omni Libraries
Brock Library
New Books
Archives & Special Collections
Search fields
Any field
contains
Enter a search terms for row
AND
Any field
contains
Enter a search terms for row
ADD A NEW ROW
CLEAR
Resource Type
All items
Language
Any language
Start Date:
Day
Month
Start Year
End Date:
Day
Month
End Year
Any field contains
AND
Any field contains
SEARCH

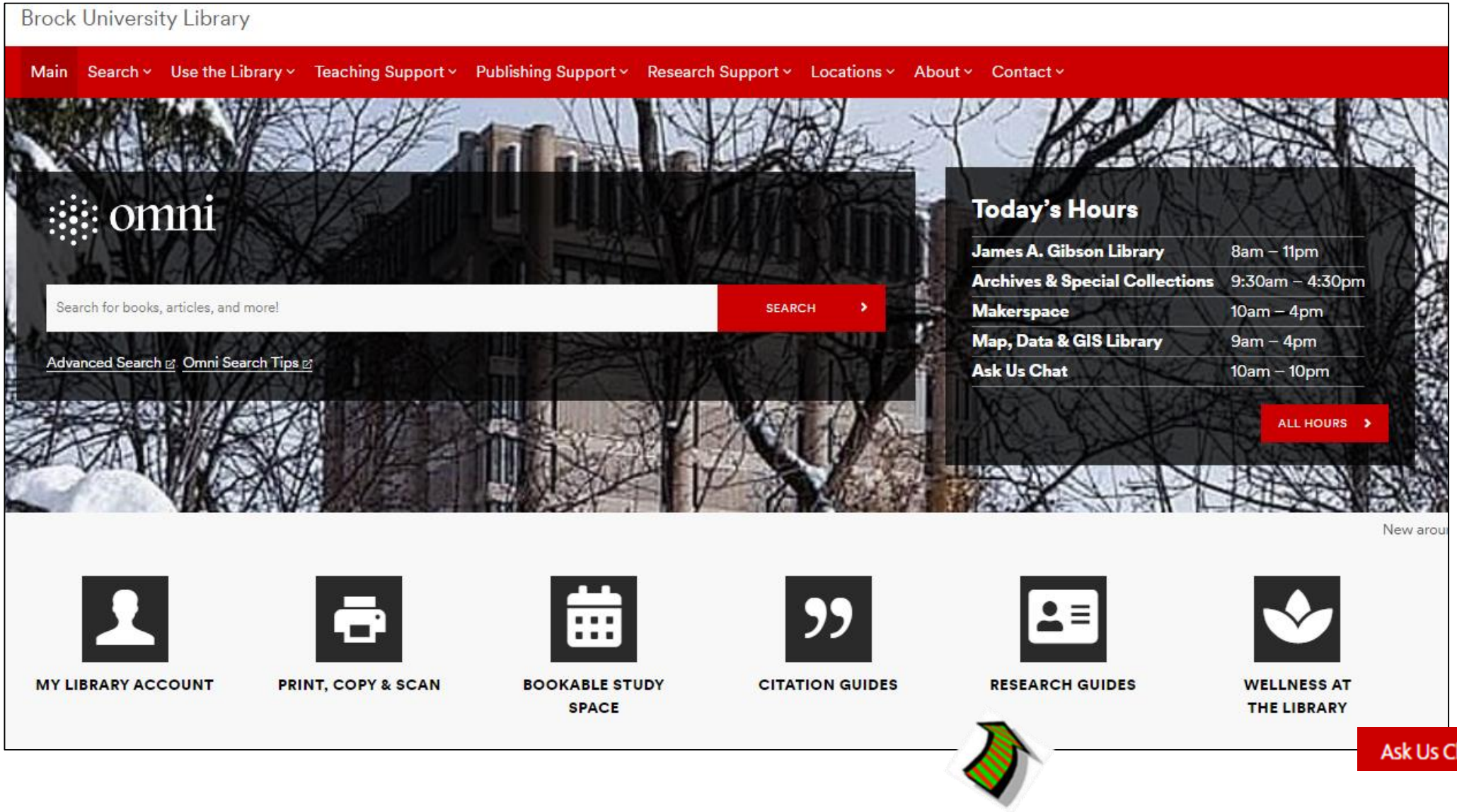

Get it from another library
Request for a full book from another library will be delivered physically to your preferred pickup location. Most requests will be filled in 7-10 business days.
Requests for a single chapter of a book, an article from a journal, or an excerpt of up to 10% of a work will be sent to your Brock email. Most digitization requests will be delivered within 3 business days. Select "I only need a specific chapter or pages' to complete your request for a book chapter or excerpt.
* Request type
Book
Article
I only need a specific chapter or pages
* Title
* Author
Edition
ISBN
Publisher
Publication year
Volume
Preferred Pickup University
* Brock University
Comment
You must read and acknowledge the following statement before submitting your request.
* I acknowledge and agree that this item is being supplied solely for my own personal use, and may only be used for the purpose of research, education, private study, review, or criticism. I agree that I will not share, distribute, publish, or make copies of this item, or otherwise provide it to any other person.
RESET FORM
SEND REQUEST

Book, chapter, paper, up to 10% of content

Get it from another library
Request for a full book from another library will be delivered physically to your preferred pickup location. Most requests will be filled in 7-10 business days.
Requests for a single chapter of a book, an article from a journal, or an excerpt of up to 10% of a work will be sent to your Brock email. Most digitization requests will be delivered within 3 business days. Select "I only need a specific chapter or pages' to complete your request for a book chapter or excerpt.
* Request type
Book
Article
* Article title
* Journal title
Author
ISSN
DOI
Auto fill
PMID
Auto fill
Publisher
* Publication year
Volume
Issue
Chapter Title or Page Range
Preferred Pickup University
* Brock University
Comment
You must read and acknowledge the following statement before submitting your request.
* I acknowledge and agree that this item is being supplied solely for my own personal use, and may only be used for the purpose of research, education, private study, review, or criticism. I agree that I will not share, distribute, publish, or make copies of this item, or otherwise provide it to any other person.
RESET FORM
SEND REQUEST

Article, paper…

https://brocku.ca/library/



https://researchguides.library.brocku.ca/CHEM

WELCOME

ARTICLES

BOOKS

CHEMICALS / DRUGS

GREY LITERATURE

DATA

BORROW FROM OTHER LIBRARIES

ADDITIONAL COURSE GUIDES

Need Help?

Ask
Chat with a librarian

Contact us at libhelp@brocku.ca or find more library help on our Research Support page.

What is this guide for?

This guide for chemistry has been designed as a general program guide and is curated by Brock librarians. It features links to most often used resources such as databases for books, peer-reviewed journal articles, theses, dissertations, open educational resources (OEDs), patents, standards, and more. Use the tabs on the left to navigate through the web page.

The ACS Guide to Scholarly Communication is an ACS publication that is constantly updated and provides access to the ACS Quick Style Guide that includes excellent information on writing, scholarship and style.

Selective course-related guides are provided when appropriate every term.

CHEM 2P20 Fall 2023 SciFinder-n Exercise ppt slides (PDF) and YouTube video (19:28)

CHEM 2P21 Winter 2024 Information Exercise form (Word), Amoxicillin sample (PDF), ppt slides (PDF) and video (YouTube, 28:28)

Library Update: Chemistry Information Seeking in an AI-driven World, Feb 2, 2024 ppt slides (PDF)

Attribution

Creative Commons License

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

WELCOME

ARTICLES

BOOKS

CHEMICALS / DRUGS

GREY LITERATURE

DATA

BORROW FROM OTHER LIBRARIES

ADDITIONAL COURSE GUIDES

Need Help?

Ask
Chat with a librarian

Contact us at libhelp@brocku.ca or find more library help on our Research Support page.

Books

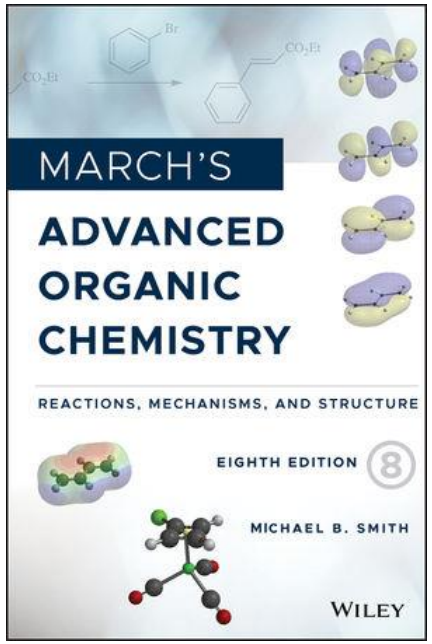
Chemistry scholarly books or ebooks range from introductory textbooks, handbooks, and subject-specific resources. A select list of databases that identify books/ebooks are listed below.

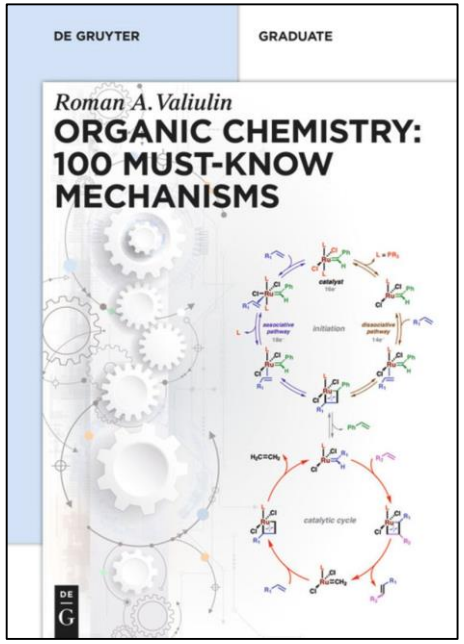
The most straightforward way to find books is by using Omni our local search interface!

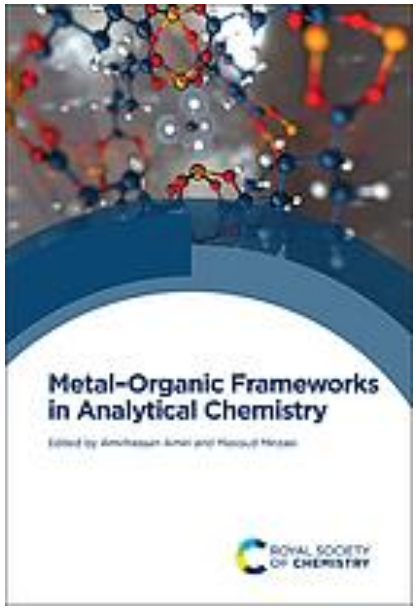
The ACS Guide to Scholarly Communication is an ACS publication that is constantly updated and provides access to the ACS Quick Style Guide that includes excellent information on writing, scholarship and style.

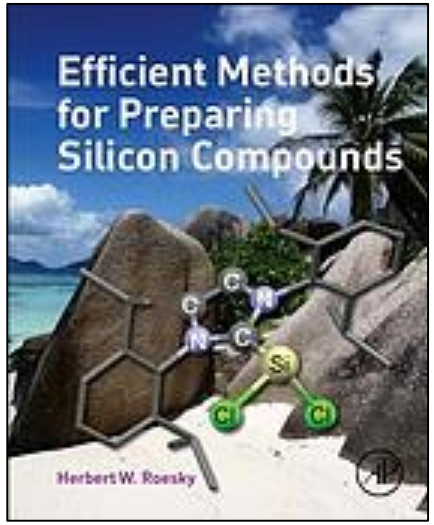
Book & E-Book databases

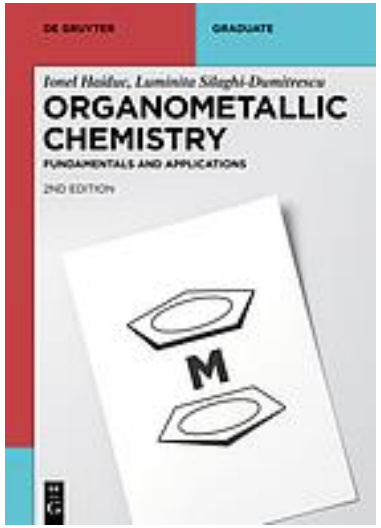
- Omni
  - Brock's largest Interdisciplinary search tool
  - Millions of journal articles, books & ebooks, newspapers, videos, magazines and more!
- Google Books
  Select "Limited preview and full view" and "Books" for best results.
- Directory of Open Access Books (DOAB)
  - Interdisciplinary
  - Find full text, peer-reviewed books and edited volumes.
  - Terms of Use from Publisher Site
- WorldCat
  - World's largest network of library-based collections.
  - Search library catalogues from around the world for books, audiovisual materials, videos, digital files, theses and journal articles.
  - Terms of Use from Publisher Site

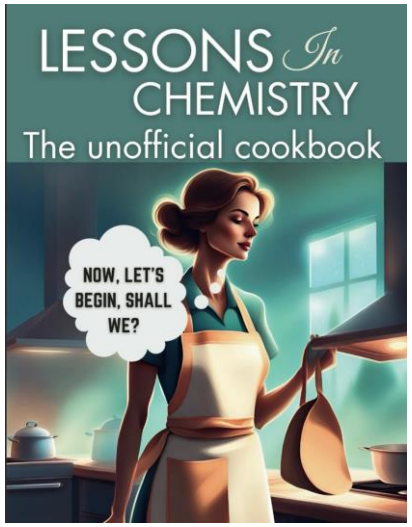

MARCH'S
ADVANCED ORGANIC CHEMISTRY
REACTIONS, MECHANISMS, AND STRUCTURE
EIGHTH EDITION
8
MICHAEL B. SMITH
WILEY

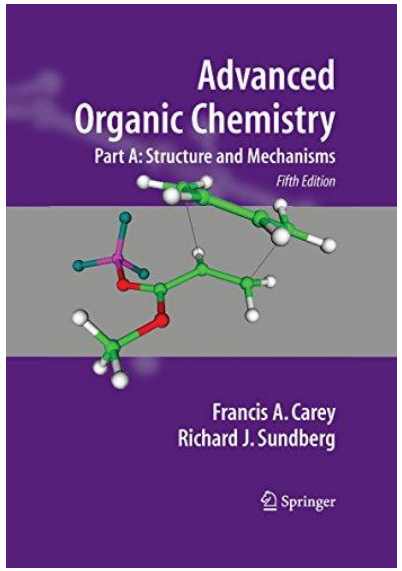

DE GRUYTER
GRADUATE
Roman A. Valiulin
ORGANIC CHEMISTRY: 100 MUST-KNOW MECHANISMS


Metal-Organic Frameworks in Analytical Chemistry
ROYAL SOCIETY OF CHEMISTRY


Efficient Methods for Preparing Silicon Compounds
Herbert W. Roesky


DE GRUYTER
GRADUATE
Ionel Haiduc, Luminita Silaghi-Dumitrescu
ORGANOMETALLIC CHEMISTRY
FUNDAMENTALS AND APPLICATIONS
2ND EDITION
M


LESSONS In CHEMISTRY
The unofficial cookbook
NOW, LET'S BEGIN, SHALL WE?


Advanced Organic Chemistry
Part A: Structure and Mechanisms
Fifth Edition
Francis A. Carey
Richard J. Sundberg
Springer

WELCOME
ARTICLES
BOOKS
CHEMICALS / DRUGS
GREY LITERATURE
DATA
BORROW FROM OTHER LIBRARIES
ADDITIONAL COURSE GUIDES

Need Help?

Contact us at libhelp@brocku.ca or find more library help on our Research Support page.

Grey Literature

Grey literature databases identify resources that are key to research and scholarship. Many are open resources that go through a quality control process before they are published.

The ACS Guide to Scholarly Communication is an ACS publication that is constantly updated and provides access to the ACS Quick Style Guide that includes excellent information on writing, scholarship and style.

Definitions are scholarly dictionaries, encyclopedias and handbooks that help define terms and provide additional context.

Dictionary of Chemistry (2020) Biochemistry and Molecular Biology (2006) Biomedicine (2010)

Taber's Cyclopedic Medical Dictionary (2021)

Compendium of Chemical Terminology (current, IUPAC)

CRC Handbook of Chemistry & Physics (2014/2015)

Periodic Table Gallery (ACS)

Patents are legal documents issued by a national or international patent agency that document an intellectual property to an exclusive invention, product or process

Standards are important documents that define a set of technical definitions, specifications, and guidelines for a product, process, or guideline.

Occupational Health and Safety information is essential to dealing with injuries, accidents, government and regulatory information.

Theses and Dissertations are important unpublished resources granted and retained by universities as capstone projects, these, and dissertations.

Open Education Resources (OERs) are digital ebooks and learning objects that can be used as open textbooks on a wide variety of general and disciplinary subjects.

WELCOME
ARTICLES
BOOKS
CHEMICALS / DRUGS
GREY LITERATURE
DATA
BORROW FROM OTHER LIBRARIES
ADDITIONAL COURSE GUIDES

Need Help?

Ask
Chat with a librarian

Contact us at libhelp@brocku.ca or find more library help on our Research Support page.

Grey Literature

Grey literature databases identify resources that are key to research and scholarship. Many are open resources that go through a quality control process before they are published.

The ACS Guide to Scholarly Communication is an ACS publication that is constantly updated and provides access to the ACS Quick Style Guide that includes excellent information on writing, scholarship and style.

Definitions are scholarly dictionaries, encyclopedias and handbooks that help define terms and provide additional context.

Dictionary of Chemistry (2020) Biochemistry and Molecular Biology (2006) Biomedicine (2010)

Taber's Cyclopedic Medical Dictionary (2021)

Compendium of Chemical Terminology (current, IUPAC)

CRC Handbook of Chemistry & Physics (2014/2015)

Periodic Table Gallery (ACS)

Patents are legal documents issued by a national or international patent agency that document an intellectual property to an exclusive invention, product or process

Standards are important documents that define a set of technical definitions, specifications, and guidelines for a product, process, or guideline.

Occupational Health and Safety information is essential to dealing with injuries, accidents, government and regulatory information.

Theses and Dissertations are important unpublished resources granted and retained by universities as capstone projects, these, and dissertations.

Open Education Resources (OERs) are digital ebooks and learning objects that can be used as open textbooks on a wide variety of general and disciplinary subjects.

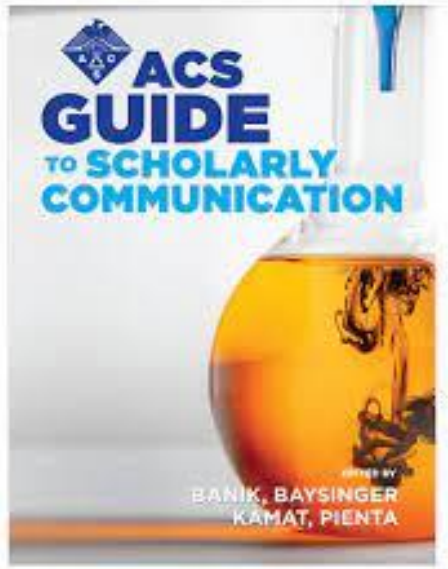


Table of Contents

PART 1: Scientific Communication

1.1 Different Ways Scientists Communicate
1.2 Ethics in Scientific Publication
1.3 Communicating Safety Information
1.4 Intellectual Property: Copyright, Permissions, & Beyond
1.5 Open Access Open Access
1.6 Chemistry Preprints
1.7 Poster Presentations
1.8 Effective Slide Presentations
1.9 Creating Effective Patents

PART 2: Scientific Journals

2.1 Writing about Your Research: Best Practices
2.2 Selecting a Scientific Journal
2.3 Organization of Your Research Article
2.4 Submission Procedures
2.5 Peer Review
2.6 Postsubmission Procedures

PART 3: Data in the Google Era

3.0 Data in the Google Era: An Introduction
3.1 Data Sharing
3.2 Chemical Structures in the Google Era
3.3 Digital Chemical Data

PART 4: Scientific Style Conventions

4.1 Graphics & Multimedia
4.2 Tables
4.3 References
4.4 Chemical Conventions
4.5 Chemical Structures
4.6 Chemical Compound Nomenclature

PART 5: Editorial Style Conventions

5.1 Effective Writing & Word Usage
5.2 Grammar, Punctuation, & Spelling
5.3 General Style Conventions
5.4 Numbers, Mathematics, & Units of Measure

PART 6: Inclusivity

6.1 ACS Inclusivity Style Guide Open Access

PART 5: Editorial Style Conventions

5.1 Effective Writing & Word Usage

5.1.1 Effective Writing

5.1.2 Five Common Word Usage Pitfalls

5.1.3 Word Usage

5.1.4 Phrases to Avoid & Suggested Alternatives

5.1.5 Additional Resources

5.2 Grammar, Punctuation, & Spelling

5.2.1 Introduction

5.2.2 Grammar

5.2.3 Punctuation

5.2.4 Spelling

5.2.5 Spelling Recommendations

5.2.6 Additional Resources

5.3 General Style Conventions

5.3.1 Introduction

5.3.2 Bold, Italics, & Special Characters

5.3.3 Capitalization

5.3.4 Hyphenation

5.3.5 Digital Terms & Conventions

5.3.6 Names

5.3.7 Abbreviations

5.3.8 Abbreviations List

5.3.9 Symbols List

5.3.10 Additional Resources

5.4 Numbers, Mathematics, & Units of Measure

5.4.1 Numerals

5.4.2 Mathematics

5.4.3 Specialized Notation

5.4.4 Units of Measure

5.4.5 The International System of Units (SI)

5.4.6 Additional Resources

REFERENCES

ACS Style Quick Guide

Teri Vogel Susan Cardinal Nancy Butkovich Donna Wrublewski Grace Baysinger

https://doi.org/10.1021/acsguide.40303 Subscribed

Copyright © 2020 American Chemical Society

Request reuse permissions

Share Add to Export

Note to the Reader: This is an open access chapter published under an ACS AuthorChoice License, which permits copying and redistribution of the chapter or any adaptations for non-commercial purposes.

In all of the examples shown here, the source type is online unless noted otherwise.

Articles from Scientific Journals

Source type	Example
journal article	Foster, J. C.; Varlas, S.; Couturaud, B.; Coe, J.; O'Reilly, R. K. Getting into Shape: Reflections on a New Generation of Cylindrical Nanostructures' Self-Assembly Using Polymer Building Block. *J. Am. Chem. Soc.* **2019**, *141* (7), 2742−2753. DOI: 10.1021/jacs.8b08648
journal article from an aggregator database	Lanzotti A.; Grasso M.; Staiano G.; Martorelli M. The Impact of Process Parameters on Mechanical Properties of Parts Fabricated in PLA with an Open-source 3-D Printer. *Rapid Prototyp. J.* **2015**, *21* (5), 604−617. DOI: 10.1108/RPJ-09-2014-0135 (accessed 2019-11-22 from ProQuest: Materials Science & Engineering Collection).
journal article early publication (article ASAP)	Shang, M.; Ren, M.; Zhou, C. Nitrogen Mustard Induces Formation of DNA−Histone Cross-Links in Nucleosome Core Particles. *Chem. Res. Toxicol.* **2019**, Article ASAP. DOI: 10.1021/acs.chemrestox.9b00354 (accessed 2019-11-21).

WELCOME
ARTICLES
BOOKS
CHEMICALS / DRUGS
GREY LITERATURE
DATA
BORROW FROM OTHER LIBRARIES
ADDITIONAL COURSE GUIDES

Need Help?

Ask
Chat with a librarian

Contact us at libhelp@brocku.c
find more library help on our
Research Support page.

Grey Literature

Grey literature databases identify resources that are key to research and scholarship. Many are open resources that go through a quality control process before they are published.

The ACS Guide to Scholarly Communication is an ACS publication that is constantly updated and provides access to the ACS Quick Style Guide that includes excellent information on writing, scholarship and style.

Definitions are scholarly dictionaries, encyclopedias and handbooks that help define terms and provide additional context.

Dictionary of Chemistry (2020) Biochemistry and Molecular Biology (2006) Biomedicine (2010)

Taber's Cyclopedic Medical Dictionary (2021)

Compendium of Chemical Terminology (current, IUPAC)

CRC Handbook of Chemistry & Physics (2014/2015)

Periodic Table Gallery (ACS)

Patents are legal documents issued by a national or international patent agency that document an intellectual property to an exclusive invention, product or process

Standards are important documents that define a set of technical definitions, specifications, and guidelines for a product, process, or guideline.

Occupational Health and Safety information is essential to dealing with injuries, accidents, government and regulatory information.

Theses and Dissertations are important unpublished resources granted and retained by universities as capstone projects, these, and dissertations.

Open Education Resources (OERs) are digital ebooks and learning objects that can be used as open textbooks on a wide variety of general and disciplinary subjects.

Theses & Dissertations

A library guide for locating theses and dissertations.

WELCOME

BROCK UNIVERSITY THESES

CANADIAN THESES

UNITED STATES AND INTERNATIONAL THESES

SUBMIT YOUR THESIS

Need Help?

Ask
Chat with a librarian

Contact us at libhelp@brocku.ca or find more library help on our Research Support page.

What is this guide for?

Theses and dissertations are extended scholarly essays that incorporate **original** research on a specific topic. They are usually written as part of the requirements for a graduate degree (e.g. MA or PhD).

This guide includes information about how to locate print and electronic theses or dissertations produced by students at Brock University as well as those produced by students at other institutions, both in Canada and internationally.

Why use Theses and Dissertations?

Theses and dissertations can be a valuable source of information for research. Theses and/or dissertations contain:

- original research
- extensive bibliographies
- thorough literature reviews
- emerging trends and voices
- datasets or surveys

https://dr.library.brocku.ca/

Search

M.Sc. Chemistry

BROWSE BY

Publication Date | Authors | Titles | Subjects

Search within this collection:

Go

Recent Submissions

Synthetic Approaches to C-1 Derivatives of Pancratistatin

Uppalapati, Bhavana; Department of Chemistry

The contents of this thesis describe a synthetic approach towards C-1 derivatives of pancratistatin, utilizing a previously published pathway to access a late-stage cis-diol. The key steps of the approach include enzymatic dihydroxylation to provide the C-ring backbone, Myers' transposition to convert an allylic alcohol into an olefin, and nu

Hydroamidation of Vinyl Ethers by Acid-Catalyzed Multicomponent Isocyanide Addition

Carlson, Brenden Matthew; Department of Chemistry

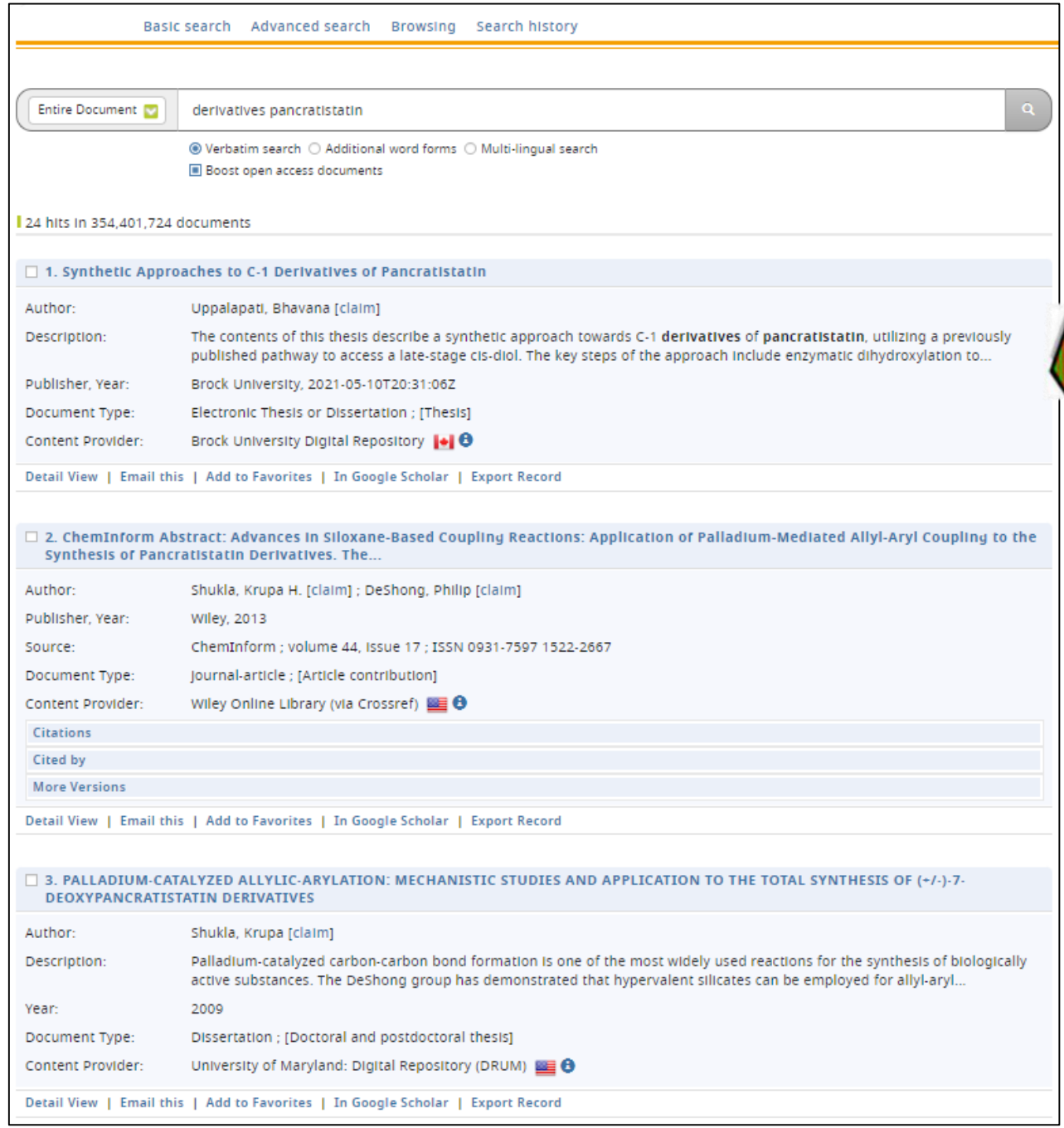
Hydroamidation of carbon–carbon double bonds is an attractive strategy for installing nitrogen functionality into molecular scaffolds and, with it, increasing molecular complexity. To date, metal-based approaches have dominated this area of chemical synthesis despite the drawbacks of air and moisture sensitivity, limited functional grou

Synthesis and Evaluation of Trans-bilayer Cross Linking Phospholipids Based on Click (Azide-Alkyne) Chemistry

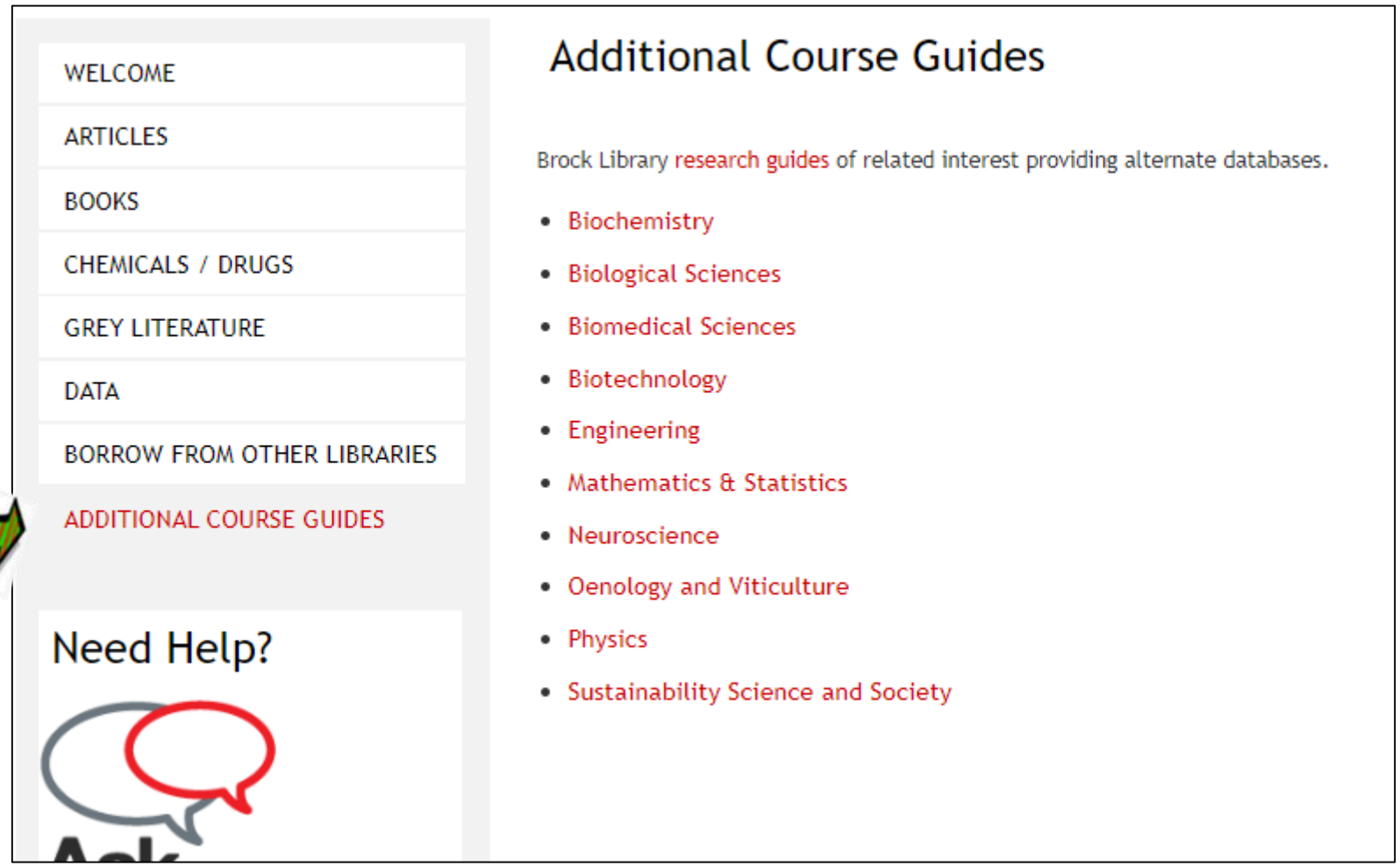
Hosseini, Yasaman; Department of Chemistry

This thesis describes the synthesis of two phosphatidylcholine (PC) derivatives that are capable of coupling with each other from the alkyl chain through click reaction to form bola-PC. Successful coupling of monomeric phosphatidylcholine derivatives would lead to synthesis of corresponding phosphatidylinositol molecules as futu

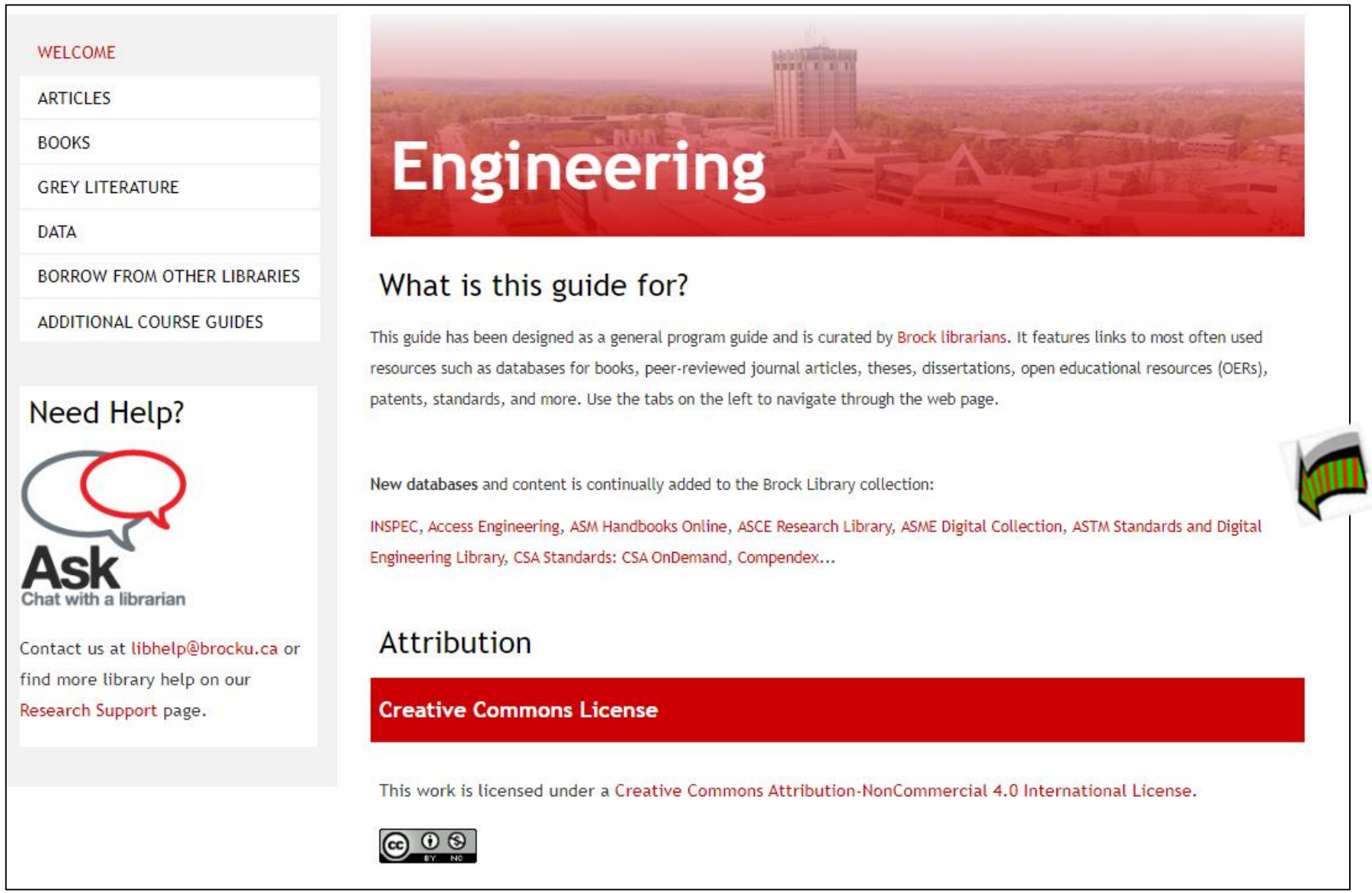
https://www.base-search.net/


Basic search
Advanced search
Browsing
Search history
Entire Document
derivatives pancratistatin
Verbatim search
Additional word forms
Multi-lingual search
Boost open access documents
24 hits in 354,401,724 documents
1. Synthetic Approaches to C-1 Derivatives of Pancratistatin
Author: Uppalapati, Bhavana [claim]
Description: The contents of this thesis describe a synthetic approach towards C-1 derivatives of pancratistatin, utilizing a previously published pathway to access a late-stage cis-diol. The key steps of the approach include enzymatic dihydroxylation to...
Publisher, Year: Brock University, 2021-05-10T20:31:06Z
Document Type: Electronic Thesis or Dissertation ; [Thesis]
Content Provider: Brock University Digital Repository
Detail View | Email this | Add to Favorites | In Google Scholar | Export Record
2. ChemInform Abstract: Advances in Siloxane-Based Coupling Reactions: Application of Palladium-Mediated Allyl-Aryl Coupling to the Synthesis of Pancratistatin Derivatives. The...
Author: Shukla, Krupa H. [claim] ; DeShong, Philip [claim]
Publisher, Year: Wiley, 2013
Source: ChemInform ; volume 44, issue 17 ; ISSN 0931-7597 1522-2667
Document Type: Journal-article ; [Article contribution]
Content Provider: Wiley Online Library (via Crossref)
Citations
Cited by
More Versions
Detail View | Email this | Add to Favorites | In Google Scholar | Export Record
3. PALLADIUM-CATALYZED ALLYLIC-ARYLATION: MECHANISTIC STUDIES AND APPLICATION TO THE TOTAL SYNTHESIS OF (+/-)-7-DEOXYPANCRATISTATIN DERIVATIVES
Author: Shukla, Krupa [claim]
Description: Palladium-catalyzed carbon-carbon bond formation is one of the most widely used reactions for the synthesis of biologically active substances. The DeShong group has demonstrated that hypervalent silicates can be employed for allyl-aryl...
Year: 2009
Document Type: Dissertation ; [Doctoral and postdoctoral thesis]
Content Provider: University of Maryland: Digital Repository (DRUM)
Detail View | Email this | Add to Favorites | In Google Scholar | Export Record

https://researchguides.library.brocku.ca/CHEM



https://researchguides.library.brocku.ca/ENGS


WELCOME
ARTICLES
BOOKS
GREY LITERATURE
DATA
BORROW FROM OTHER LIBRARIES
ADDITIONAL COURSE GUIDES
Need Help?
Ask
Chat with a librarian
Contact us at libhelp@brocku.ca or find more library help on our Research Support page.
Engineering
What is this guide for?
This guide has been designed as a general program guide and is curated by Brock librarians. It features links to most often used resources such as databases for books, peer-reviewed journal articles, theses, dissertations, open educational resources (OERs), patents, standards, and more. Use the tabs on the left to navigate through the web page.
New databases and content is continually added to the Brock Library collection:
INSPEC, Access Engineering, ASM Handbooks Online, ASCE Research Library, ASME Digital Collection, ASTM Standards and Digital Engineering Library, CSA Standards: CSA OnDemand, Compendex...
Attribution
Creative Commons License
This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

Agenda

What's new in the library
Databases – lots of them
AI-driven innovation
Where, how and when to get help!

https://www.dreamstime.com/

WELCOME

ARTICLES

BOOKS

CHEMICALS / DRUGS

GREY LITERATURE

DATA

BORROW FROM OTHER LIBRARIES

ADDITIONAL COURSE GUIDES

Need Help?

Contact us at libhelp@brocku.ca or find more library help on our Research Support page.

Articles

Journal articles are scholarly works that go through a quality control process called peer-review before they are published.

Several databases provide access to regional, national and international news articles.

A select list of databases that include scholarly articles are listed below.

The ACS Guide to Scholarly Communication is an ACS pu
Style Guide that includes excellent information on writ

- Google Scholar
  - Find Peer-reviewed papers, theses, boo
    societies, repositories, universities and
  - Off-Campus access to Brock resources is
    follows:
    1. Click on Scholar Settings
    2. Select 'Library links' from the left me
    3. Type Brock in the Library links box, a
    4. Select Brock in the resulting list
    5. Click on the 'Save' button
    6. Follow the Find it @ Brock links to ac
- Web of Science Core Collection
  - Scholarly resources across all disciplines
  - Access to Cited Reference searching.
  - Includes Proquest Dissertations and The
  - Permitted Uses

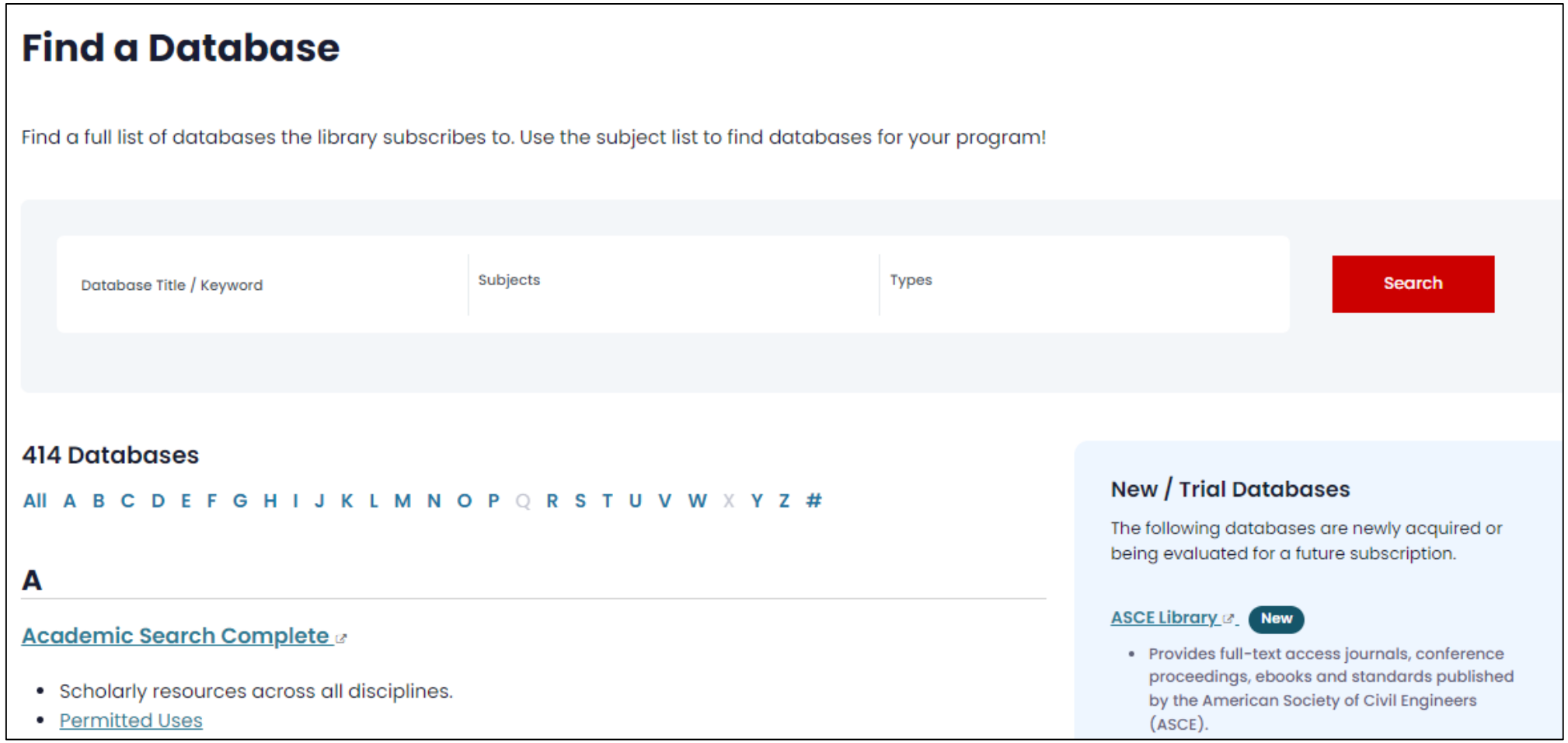
more info...

- SciFinder-n
  - Core chemistry, medicine, health, environmental and scientific journals, patents from international agencies, single and multi-step reactions, predicted and experimental property values, reports and dissertations from 1800s-present.
  - SciFinder-n is a completely different and updated interface to the classic CAS SciFinder database, with improved search algorithm and added features
  - Includes CAplus, MEDLINE, CAS Registry, and CASREACTS
  - Features include Retrosynthesis, Biosequence, PatentPak, and Methods Synthesis
  - For access on and off campus - register for account, create username & password, confirm registration by e-mail
  - Disable pop-up blocking while accessing the site.
  - Permitted Uses

more info...

- Reaxys
  - Find chemical structures, reactions, and properties.
  - Useful for researching synthetic methods of chemical compounds, characterizing synthesized compounds, or searching for critically evaluated data on physical, chemical, spectral, bioactivity, or toxicological properties.
  - Includes Beilstein (to 1959, Supplement IV); Gmelin (to 1975); and selected organic chemistry patents (1869-1980) with English-language chemical patents (US, WO, EP, 1976+) from selected primary IPC classes.
  - For full usability set up an individual account for access on and off campus. Java and JRE plugins may be required.
  - Permitted Uses

https://researchguides.library.brocku.ca/az/databases


Find a Database
Find a full list of databases the library subscribes to. Use the subject list to find databases for your program!
Database Title / Keyword
Subjects
Types
Search
414 Databases
All A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #
A
Academic Search Complete
Scholarly resources across all disciplines.
Permitted Uses
New / Trial Databases
The following databases are newly acquired or being evaluated for a future subscription.
ASCE Library
New
Provides full-text access journals, conference proceedings, ebooks and standards published by the American Society of Civil Engineers (ASCE).

Reaxys®

SciFinder^n
A CAS SOLUTION

SOS

Clarivate™
Web of Science

Scopus®

PubChem

Academic Search Complete, Access Engineering, ArXiv.org, BASE, BioOne Complete, bioRxiv, ChEBI, ChEMBL, CHEMINFO, ChemRxiv, ChemSpider, Common Chemistry (ACS), Compendex, CORE, Dimensions, Directory of Open Access Journals (DOAJ), Education Source, Elicit, Embase, eMolecules, Espacenet, figshare, Google, Advanced Google, Google Books, Google Scholar, INSPEC, Keenious, MEDLINE via PubMed, MEDLINE via SciFinder-n, MEDLINE via PubMed, Omni, Open Alex, ORCiD, OSF Preprints, Oxford Reference, Paperity, PLOS, PubChem, ResearchGate, Reaxys, ResearchRabbit, Scholars Portal E-Journals, SciELO, SciFinder-n, Scite, Scilit, ~~Scopus~~, Semantic Scholar, The Lens, Web of Science Complete, Web of Science Core Collection, WorldWideScience.org, WorldCat, Zenodo…

Open
Subscription / Proprietary

https://elicit.com

Elicit

What top qualitative research themes are found in sociology, leisure, tourism and play?

- Searching more than 125 million academic papers
- Summarizing the first 4 abstracts
- Results

Summary of top 4 papers

Copy

Qualitative research in sociology, leisure, tourism, and play is a growing field, with a focus on the underlying philosophy and principles (Patterson, 2002). It has been particularly useful in tourism quality-of-life (QOL) studies, where it has been used to explore the impact of tourism on host community QOL and traveler perceptions (Magnini, 2012). The role of qualitative methods in exploring various tourism themes, such as mass tourism, niche tourism, and tourist behavior, has also been highlighted (Robinson, 2010). Furthermore, the use of a perspectival approach to data collection and the textual construction of qualitative research accounts have been emphasized in the context of sport and tourism (Harris, 2006).

Collecting and analyzing qualitative data: Hermeneutic principles, methods and case examples
M. E. Patterson +1
2002 188 citations

The Role of Qualitative Methods in Tourism QOL Research: A Critique and Future Agenda
Vincent P. Magnini +2
2012 4 citations DOI

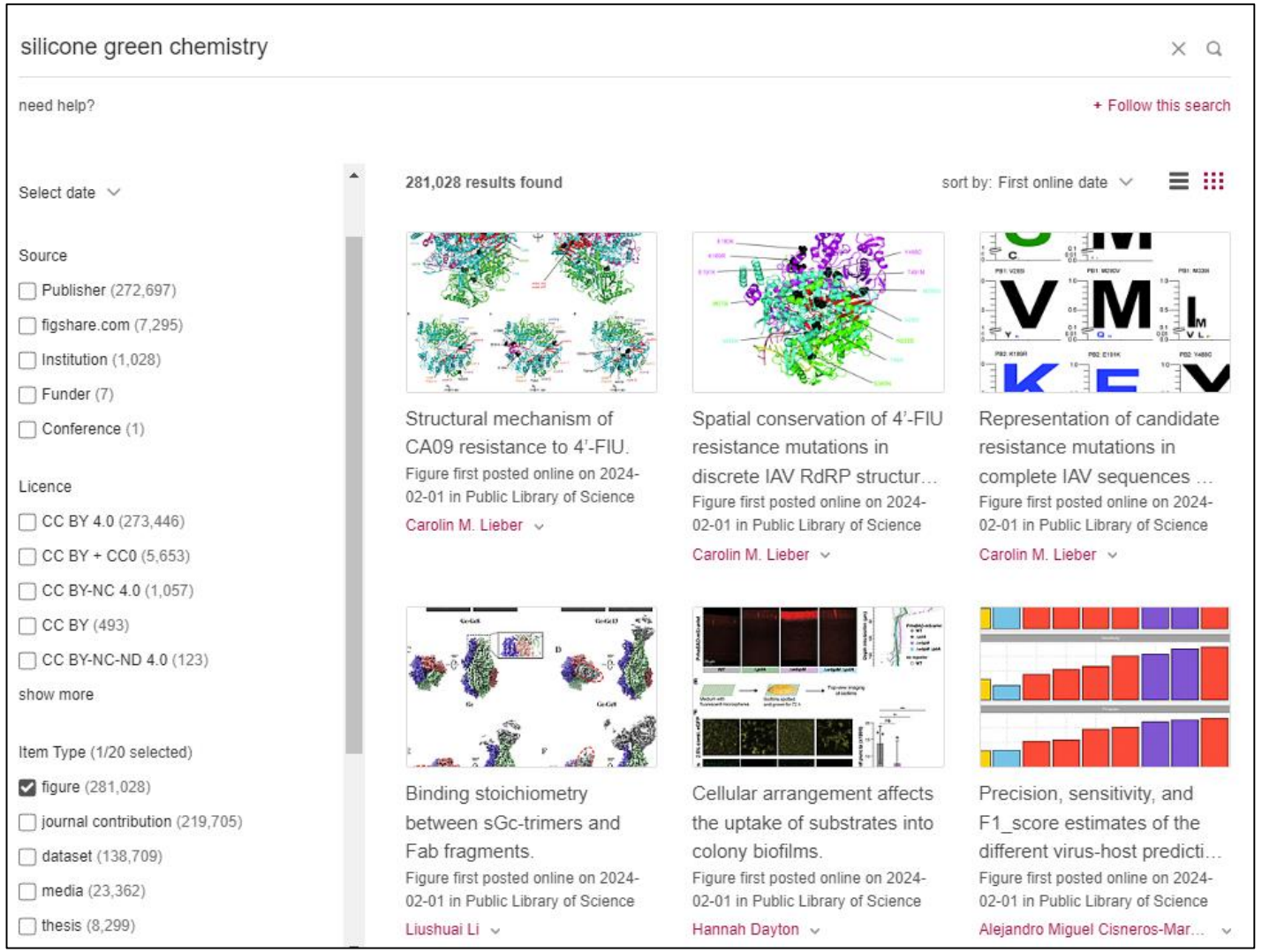
Research themes for tourism.
P. Robinson +2
2010 85 citations DOI

The Science of Research in Sport and Tourism: Some Reflections upon the Promise of the Sociological Imagination
John Harris
2006 23 citations DOI

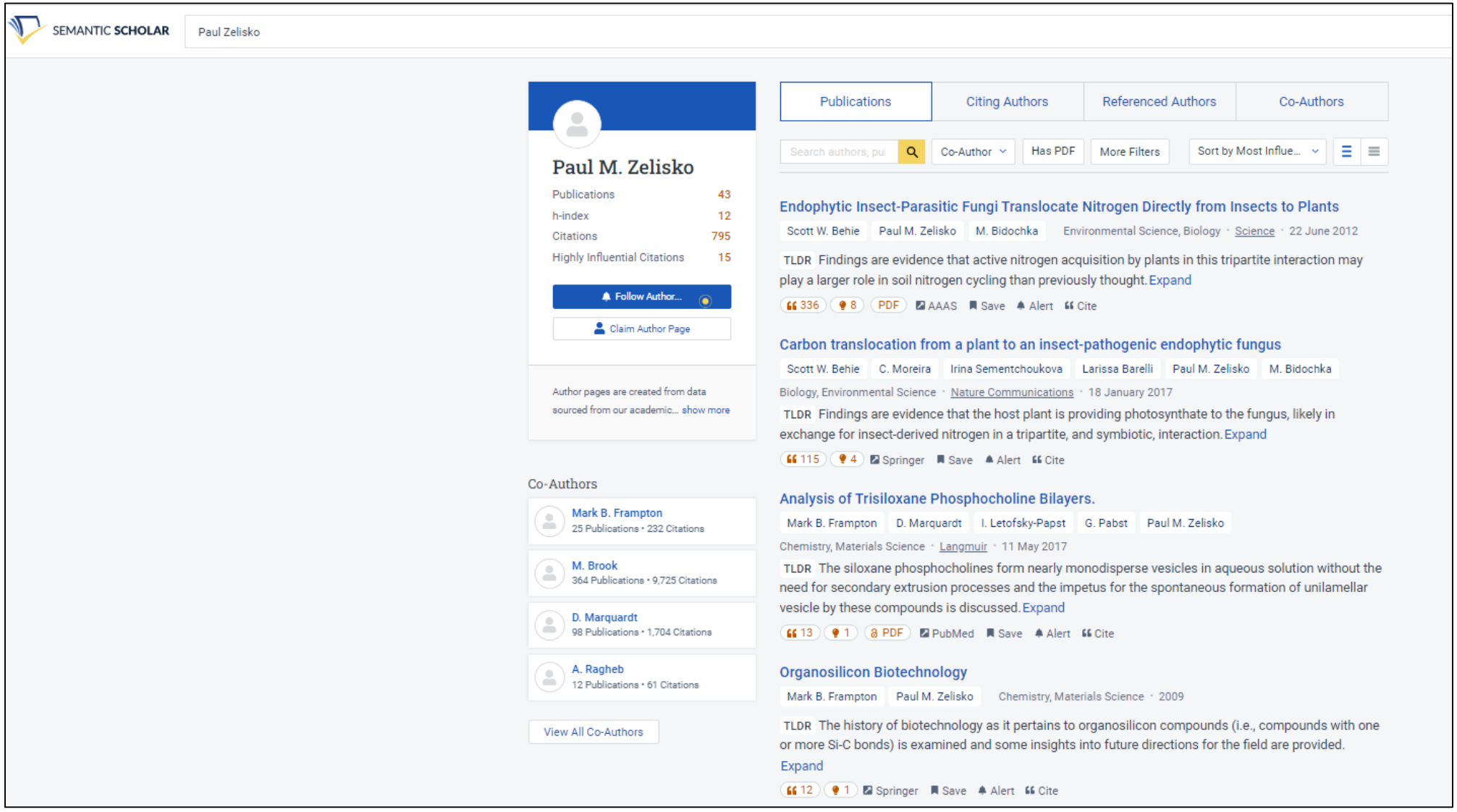
Current sociological theories and issues in tourism
Erik Cohen +1
2012 359 citations PDF DOI

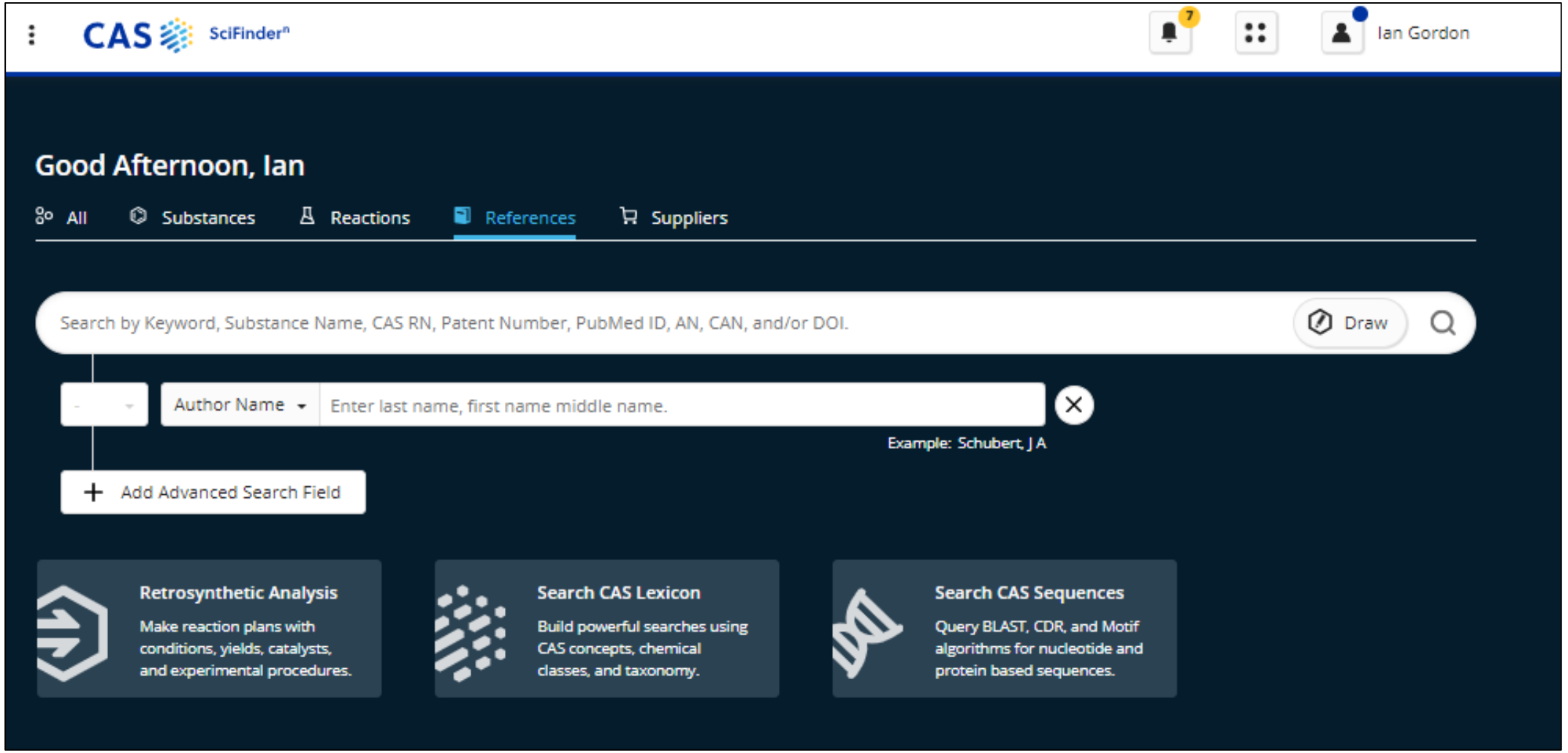
Tourism and Leisure Research Methods: Data Collection, Analysis, and Interpretation
Mick Finn +2
2000 478 citations

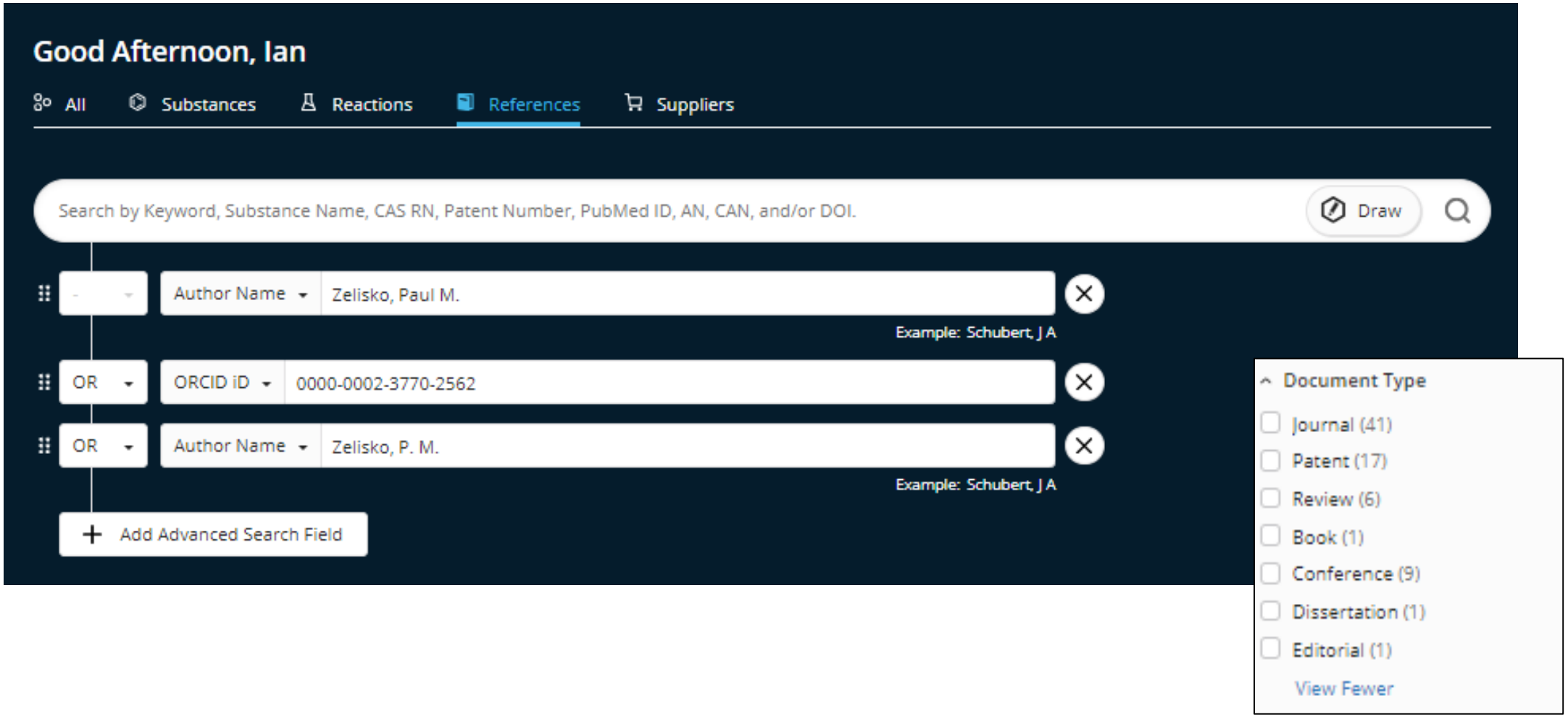
https://figshare.com/


silicone green chemistry
need help?
+ Follow this search
Select date
Source
Publisher (272,697)
figshare.com (7,295)
Institution (1,028)
Funder (7)
Conference (1)
Licence
CC BY 4.0 (273,446)
CC BY + CC0 (5,653)
CC BY-NC 4.0 (1,057)
CC BY (493)
CC BY-NC-ND 4.0 (123)
show more
Item Type (1/20 selected)
figure (281,028)
journal contribution (219,705)
dataset (138,709)
media (23,362)
thesis (8,299)
281,028 results found
sort by: First online date
Structural mechanism of CA09 resistance to 4'-FIU.
Figure first posted online on 2024-02-01 in Public Library of Science
Carolin M. Lieber
Spatial conservation of 4'-FIU resistance mutations in discrete IAV RdRP structur…
Figure first posted online on 2024-02-01 in Public Library of Science
Carolin M. Lieber
Representation of candidate resistance mutations in complete IAV sequences …
Figure first posted online on 2024-02-01 in Public Library of Science
Carolin M. Lieber
Binding stoichiometry between sGc-trimers and Fab fragments.
Figure first posted online on 2024-02-01 in Public Library of Science
Liushuai Li
Cellular arrangement affects the uptake of substrates into colony biofilms.
Figure first posted online on 2024-02-01 in Public Library of Science
Hannah Dayton
Precision, sensitivity, and F1_score estimates of the different virus-host predicti…
Figure first posted online on 2024-02-01 in Public Library of Science
Alejandro Miguel Cisneros-Mar…

https://www.semanticscholar.org/


SEMANTIC SCHOLAR
Paul Zelisko
Paul M. Zelisko
Publications 43
h-index 12
Citations 795
Highly Influential Citations 15
Follow Author...
Claim Author Page
Author pages are created from data sourced from our academic... show more
Co-Authors
Mark B. Frampton
25 Publications • 232 Citations
M. Brook
364 Publications • 9,725 Citations
D. Marquardt
98 Publications • 1,704 Citations
A. Ragheb
12 Publications • 61 Citations
View All Co-Authors
Publications
Citing Authors
Referenced Authors
Co-Authors
Search authors, pu
Co-Author
Has PDF
More Filters
Sort by Most Influe...
Endophytic Insect-Parasitic Fungi Translocate Nitrogen Directly from Insects to Plants
Scott W. Behie Paul M. Zelisko M. Bidochka Environmental Science, Biology · Science · 22 June 2012
TLDR Findings are evidence that active nitrogen acquisition by plants in this tripartite interaction may play a larger role in soil nitrogen cycling than previously thought. Expand
336 8 PDF AAAS Save Alert Cite
Carbon translocation from a plant to an insect-pathogenic endophytic fungus
Scott W. Behie C. Moreira Irina Sementchoukova Larissa Barelli Paul M. Zelisko M. Bidochka
Biology, Environmental Science · Nature Communications · 18 January 2017
TLDR Findings are evidence that the host plant is providing photosynthate to the fungus, likely in exchange for insect-derived nitrogen in a tripartite, and symbiotic, interaction. Expand
115 4 Springer Save Alert Cite
Analysis of Trisiloxane Phosphocholine Bilayers.
Mark B. Frampton D. Marquardt I. Letofsky-Papst G. Pabst Paul M. Zelisko
Chemistry, Materials Science · Langmuir · 11 May 2017
TLDR The siloxane phosphocholines form nearly monodisperse vesicles in aqueous solution without the need for secondary extrusion processes and the impetus for the spontaneous formation of unilamellar vesicle by these compounds is discussed. Expand
13 1 PDF PubMed Save Alert Cite
Organosilicon Biotechnology
Mark B. Frampton Paul M. Zelisko Chemistry, Materials Science · 2009
TLDR The history of biotechnology as it pertains to organosilicon compounds (i.e., compounds with one or more Si-C bonds) is examined and some insights into future directions for the field are provided.
Expand
12 1 Springer Save Alert Cite


CAS SciFinder
7
Ian Gordon
Good Afternoon, Ian
All
Substances
Reactions
References
Suppliers
Search by Keyword, Substance Name, CAS RN, Patent Number, PubMed ID, AN, CAN, and/or DOI.
Draw
Author Name
Enter last name, first name middle name.
Example: Schubert, J A
Add Advanced Search Field
Retrosynthetic Analysis
Make reaction plans with conditions, yields, catalysts, and experimental procedures.
Search CAS Lexicon
Build powerful searches using CAS concepts, chemical classes, and taxonomy.
Search CAS Sequences
Query BLAST, CDR, and Motif algorithms for nucleotide and protein based sequences.


Good Afternoon, Ian
All
Substances
Reactions
References
Suppliers
Search by Keyword, Substance Name, CAS RN, Patent Number, PubMed ID, AN, CAN, and/or DOI.
Draw
Author Name
Zelisko, Paul M.
Example: Schubert, J A
OR
ORCID iD
0000-0002-3770-2562
OR
Author Name
Zelisko, P. M.
Example: Schubert, J A
Add Advanced Search Field
Document Type
Journal (41)
Patent (17)
Review (6)
Book (1)
Conference (9)
Dissertation (1)
Editorial (1)
View Fewer

Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers

Substances (8) | Reactions (0) | Citing (2) | Citation Map | Save

JOURNAL

Source
Biomacromolecules
Volume: 24
Issue: 8
Pages: 3463-3471
Journal; Article; Research Support, Non-U.S. Gov't
2023
DOI:
10.1021/acs.biomac.3c00185

CODEN: BOMAF6
E-ISSN: 1526-4602
ISSN-L: 1525-7797

Database Information
AN: 2023:1550391
PubMed ID: 37506046
CAplus and MEDLINE

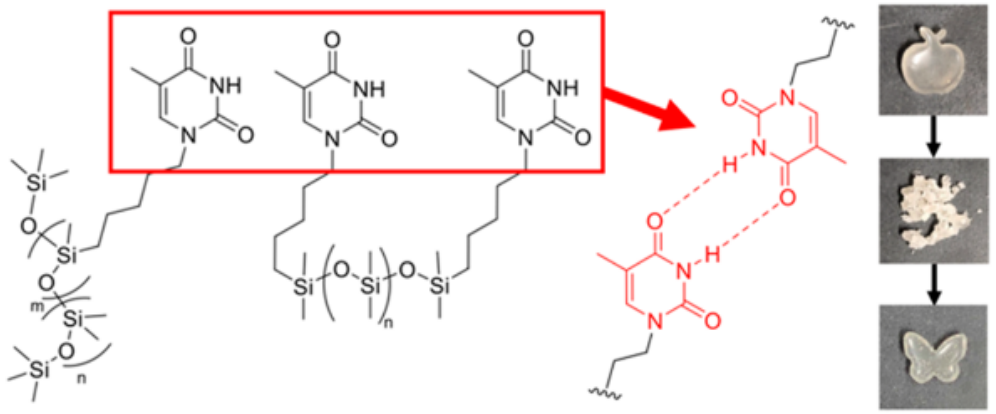
Company/Organization
Department of Chemistry, Centre for Biotechnology
Brock University
St. Catharines, Ontario L2S 3A1
Canada

Publisher
American Chemical Society

Language
English

By: Voigt, Laura J.; Tucker, Katie E.; Zelisko, Paul M.

In DNA, thymine typically forms hydrogen bonds with adenine to hold two complementary strands together and to preserve the genetic code. While thymine is typically absent in RNA, a thymine-thymine hydrogen bonding structure is reminiscent of the wobble region in tRNA recognition, where noncanonical base pairing can occur. This noncanonical base pairing can be applied to synthetic polymer systems, where thymine is free to hydrogen bond with itself. In this work, the natural hydrogen bonding capacity of thymine was used to produce silicone polymer systems designed to be cross-linked by hydrogen bonds. Backbone and end-group-modified silicones were synthesized with differing concentrations of thymine, which facilitated the crosslinking of the polymeric strands. Removing the hydrogen on N3-which is typically involved in hydrogen bonding-resulted in systems with similar viscosities to the starting material and that were devoid of any apparent cross-links. Differential scanning calorimetry (DSC) studies of the thymine-modified polymers displayed thermal absorptions and releases, indicative of bond breaking and reformation, around 100 and 60 °C, resp. The cycle of bond breaking and formation could be repeated without any noticeable degradation of the chem. structure of the polymers. These polymeric materials could be readily recycled and remolded by heating them at 110 °C for 5 min, followed by cooling to room temperature, confirming their thermoplastic nature.



Keywords: thymine silicone polymer dna

View Source | Full Text

Voigt, L. J. J.; Tucker, K. E. E.; Zelisko, P. M. M. Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers. BIOMACROMOLECULES 2023, 24 (8), 3463–3471. https://doi.org/10.1021/acs.biomac.3c00185.

https://zbib.org/

zoterobib

10.1021/acs.biomac.3c00185 Cite

Manual Entry

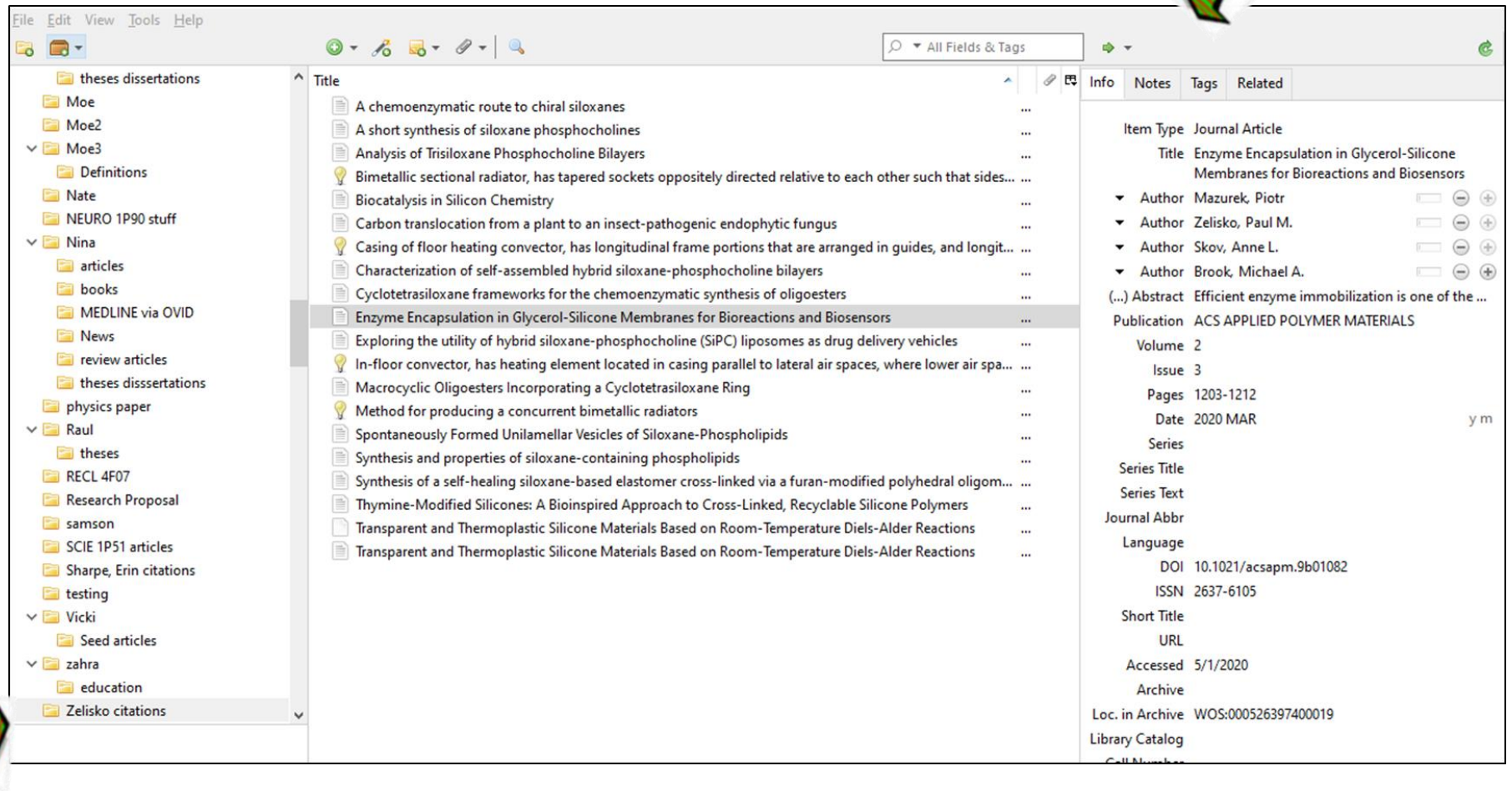
(1) Voigt, L. J.; Tucker, K. E.; Zelisko, P. M. Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers. *Biomacromolecules* **2023**, *24* (8), 3463–3471. https://doi.org/10.1021/acs.biomac.3c00185.

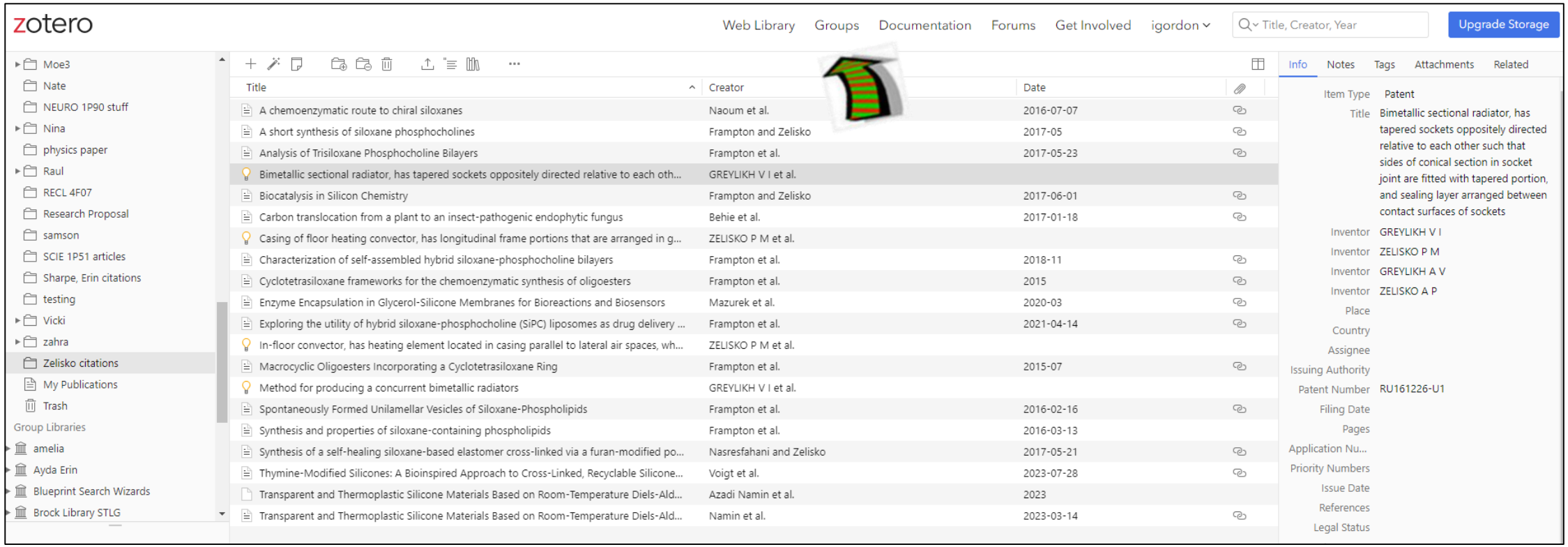
Close Delete Edit

Bibliography

American Chemical Society

https://www.zotero.org/




zotero
Web Library
Groups
Documentation
Forums
Get Involved
igordon
Title, Creator, Year
Upgrade Storage
Moe3
Nate
NEURO 1P90 stuff
Nina
physics paper
Raul
RECL 4F07
Research Proposal
samson
SCIE 1P51 articles
Sharpe, Erin citations
testing
Vicki
zahra
Zelisko citations
My Publications
Trash
Group Libraries
amelia
Ayda Erin
Blueprint Search Wizards
Brock Library STLG
Title
Creator
Date
A chemoenzymatic route to chiral siloxanes
Naoum et al.
2016-07-07
A short synthesis of siloxane phosphocholines
Frampton and Zelisko
2017-05
Analysis of Trisiloxane Phosphocholine Bilayers
Frampton et al.
2017-05-23
Bimetallic sectional radiator, has tapered sockets oppositely directed relative to each oth...
GREYLIKH V I et al.
Biocatalysis in Silicon Chemistry
Frampton and Zelisko
2017-06-01
Carbon translocation from a plant to an insect-pathogenic endophytic fungus
Behie et al.
2017-01-18
Casing of floor heating convector, has longitudinal frame portions that are arranged in g...
ZELISKO P M et al.
Characterization of self-assembled hybrid siloxane-phosphocholine bilayers
Frampton et al.
2018-11
Cyclotetrasiloxane frameworks for the chemoenzymatic synthesis of oligoesters
Frampton et al.
2015
Enzyme Encapsulation in Glycerol-Silicone Membranes for Bioreactions and Biosensors
Mazurek et al.
2020-03
Exploring the utility of hybrid siloxane-phosphocholine (SiPC) liposomes as drug delivery ...
Frampton et al.
2021-04-14
In-floor convector, has heating element located in casing parallel to lateral air spaces, wh...
ZELISKO P M et al.
Macrocyclic Oligoesters Incorporating a Cyclotetrasiloxane Ring
Frampton et al.
2015-07
Method for producing a concurrent bimetallic radiators
GREYLIKH V I et al.
Spontaneously Formed Unilamellar Vesicles of Siloxane-Phospholipids
Frampton et al.
2016-02-16
Synthesis and properties of siloxane-containing phospholipids
Frampton et al.
2016-03-13
Synthesis of a self-healing siloxane-based elastomer cross-linked via a furan-modified po...
Nasresfahani and Zelisko
2017-05-21
Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone...
Voigt et al.
2023-07-28
Transparent and Thermoplastic Silicone Materials Based on Room-Temperature Diels-Ald...
Azadi Namin et al.
2023
Transparent and Thermoplastic Silicone Materials Based on Room-Temperature Diels-Ald...
Namin et al.
2023-03-14
Info
Notes
Tags
Attachments
Related
Item Type
Patent
Title
Bimetallic sectional radiator, has tapered sockets oppositely directed relative to each other such that sides of conical section in socket joint are fitted with tapered portion, and sealing layer arranged between contact surfaces of sockets
Inventor
GREYLIKH V I
Inventor
ZELISKO P M
Inventor
GREYLIKH A V
Inventor
ZELISKO A P
Place
Country
Assignee
Issuing Authority
Patent Number
RU161226-U1
Filing Date
Pages
Application Nu...
Priority Numbers
Issue Date
References
Legal Status

BioMACROMOLECULES

pubs.acs.org/Biomac

Article

Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers

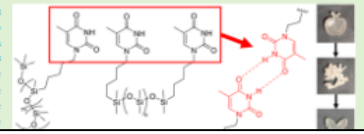
Laura J. Voigt, Katie E. Tucker, and Paul M. Zelisko*

Cite This: *Biomacromolecules* 2023, 24, 3463−3471

Read Online

ACCESS | Metrics & More | Article Recommendations | Supporting Information

ABSTRACT: In DNA, thymine typically forms hydrogen bonds with adenine to hold two complementary strands together and to preserve the genetic code. While thymine is typically absent in RNA, a thymine−thymine hydrogen bonding structure is reminiscent of the wobble region in tRNA recognition, where noncanonical base pairing can occur. This noncanonical base pairing can be applied to synthetic polymer systems, where thymine is free to hydrogen bond with itself. In this work, the natural hydrogen bonding capacity of thymine was use
silicone polymer systems designed to be cross-linked
bonds. Backbone and end-group-modified silicones w
cross-linking of the polymeric strands. Removing the
in systems with similar viscosities to the starting ma
calorimetry (DSC) studies of the thymine-modifie
breaking and reformation, around 100 and 60 °C, resp
any noticeable degradation of the chemical structur
remolded by heating them at 110 °C for 5 min, follo



INTRODUCTION

Solid silicone materials are typically manufactured by
cross-links between the individual polymer strar
method of cross-linking silicones includes using
component system, in either a room temperature vulc
(RTV) process with a tin catalyst, or an addition cu
using a platinum catalyst.[1] Although quite effective
linking silicones, both metals in these catalysts must
and are nonrenewable; tin is also extremely neurotoxi
metal-based systems are extremely effective at catal
formation of cross-links in silicones; however, the tox
of tin and the scarcity and cost of platinum neces
need to develop modalities for forming cross-links in
that are more cost-effective and environmentally
Another detriment of silicone materials cross-linked u
or addition cure methodologies is that the resulting
are typically thermoset and cannot be readily rem
recycled at the end of their useful lifetime.[4] Unlike t
materials, thermoplastics have the capacity to be res
response to an external stimulus, such as temperature
them recyclable and thus more eco-friendly.[5,6] A
thermoplastic silicones involves the creation of a
cross-links between the polymer strands, resulting in t
to break and reform these cross-links at will, and
reshape, reform, and recycle the material.[7]

Hydrogen bonding has become a useful too
construction of polymeric materials, evolving from Sta

ACS Publications © 2023 American Chemic

CAS SciFinder[n]

Reference Detail

View in SciFinder[n]

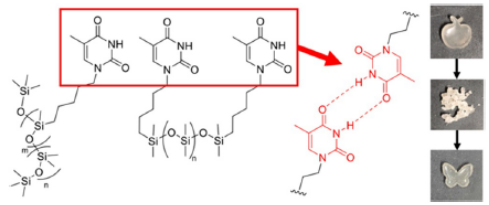
Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers

By: Voigt, Laura J.; Tucker, Katie E.; Zelisko, Paul M.

8 Substances • 0 Reactions • 2 Citations

In DNA, thymine typically forms hydrogen bonds with adenine to hold two complem entary strands together and to preserve the genetic code. While thymine is typically absent in RNA, a thymine-thymine hydrogen bonding structure is reminiscent of the wobble region in tRNA recognition, where noncanonical base pairing can occur. This noncan onical base pairing can be applied to synthetic polymer systems, where thymine is free to hydrogen bond with itself. In this work, the natural hydrogen bonding capacity of thymine was used to produce silicone polymer systems designed to be cross-linked by hydrogen bonds. Backbone and end- group-modified silicones were synthesized with differing concentrations of thymine, which facilitated the crosslinking of the polymeric strands. Removing the hydrogen on N3-which is typically involved in hydrogen bonding-resulted in systems with similar viscos ities to the starting material and that were devoid of any apparent cross-links. Differential scanning calorimetry (DSC) studies of the thymine-modified polymers displayed thermal absorptions and releases, indicative of bond breaking and reform ation, around 100 and 60 °C, resp. The cycle of bond breaking and formation could be repeated without any noticeable degradation of the chem. structure of the polymers. These polymeric materials could be readily recycled and remolded by heating them at 110 °C for 5 min, followed by cooling to room temperature, confirming their thermoplastic nature.

Keywords: thymine silicone polymer dna



Journal

Source
Biomacromolecules
Volume: 24
Issue: 8
Pages: 3463-3471
Journal; Article; Research Support, Non-U.S. Gov't
2023
DOI: 10.1021/acs.biomac.3c00185

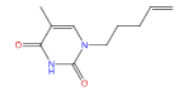
CODEN: BOMAF6
E-ISSN: 1526-4602
ISSN-L: 1525-7797
Check Local Holdings

View all Sources in SciFinder[n]

Database Information
AN: 2023:1550391
PubMed ID: 37506046
CAplus and MEDLINE
Company/Organization
Department of Chemistry, Centre for Biotechnology
Brock University
St. Catharines, Ontario L2S 3A1
Canada
Publisher
American Chemical Society
Language
English

Substances (8)

132416-99-0

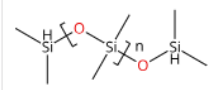


$C_{10}H_{14}N_2O_2$
5-Methyl-1-(4-penten-1-yl)-2,4(1*H*,3*H*)-pyrimidinedione

Role: Reactant, Synthetic Preparation, Technical or Engineered Material Use, Therapeutic Use, Reactant or Reagent, Preparation, Uses, Biological Study

Notes: reaction products with polysiloxanes

115254-29-0

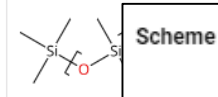


$(C_2H_6OSi)_nC_4H_{14}OSi_2$
Dimethylsilyl-terminated polydimethylsiloxane

Role: Synthetic Preparation, Technical or Engineered Material Use, Therapeutic Use, Preparation, Uses, Biological Study

Notes: reaction products with thymine derivatives

42557-10-8

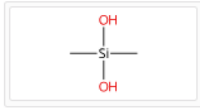


$(C_2H_6OSi)_nC_6H_{18}OS$
Trimethylsilyl-terminated (dimethylsiloxane)

Role: Synthetic Preparat
Engineered Material Use
Preparation, Uses, Biolo

Notes: reaction product
tives

31900-57-9



$(C_2H_8O_2Si)_x$
Poly(dimethylsilanediol)

Role: Synthetic Preparation, Technical or Engineered Material Use, Therapeutic Use, Preparation, Uses, Biological Study

Notes: dimethylsilyl-terminated or trimethylsilyl-terminated, reaction products with thymine derivatives

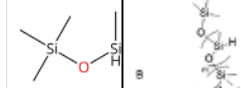
9007-49-2

Image Not Available

Unspecified
DNA

Role: Unspecified

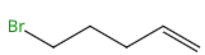
1873-88-7



$C_7H_{22}O_2Si_3$
1,1,1,3,5,5,5-Heptar

Role: Reactant, Reactant

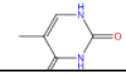
1119-51-3



C_5H_9Br
5-Bromo-1-pentene

Role: Reactant, Reactant or R

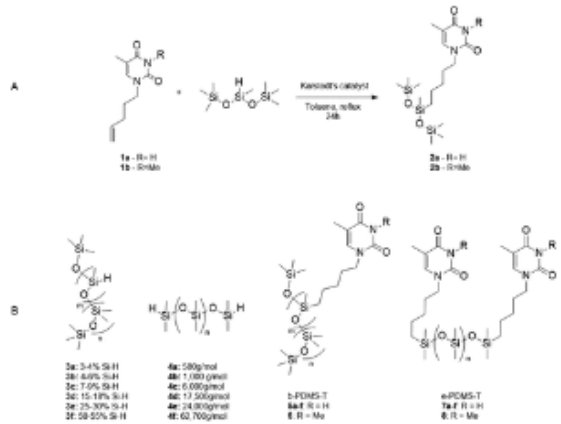
65-71-4



Concepts

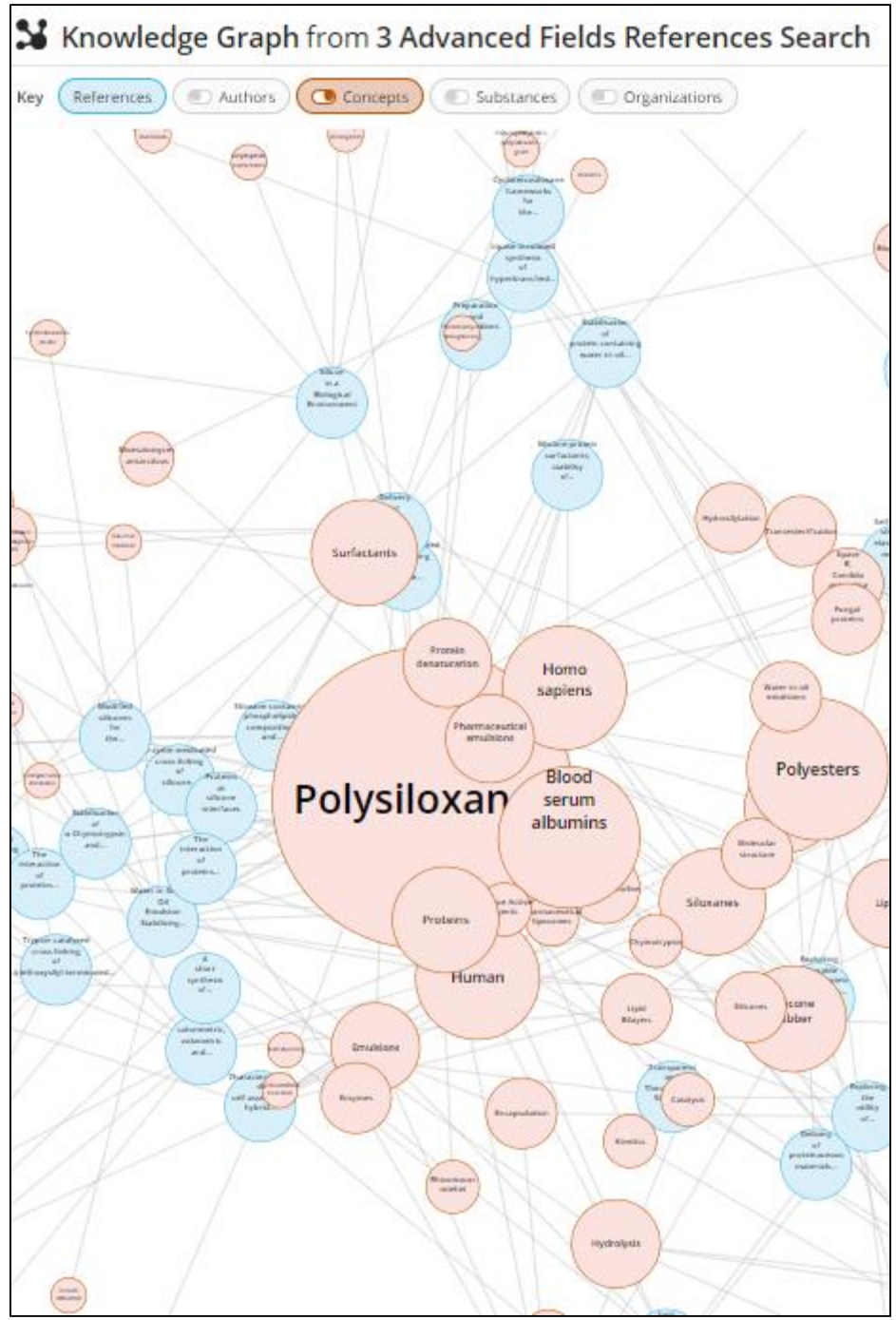
Absorption	Polymers
Biodegradation	Role: Polymer in Formulation; Therapeutic Use
Crosslinking agents	Temperature
Heat transfer	Thermoplasticity
Hydrogen bond	Viscosity

Scheme 1



Scheme 1. (A) Synthesis of Model Compounds (2a, 2b). (B) Starting Material Polymers (3a−f and 4a−f) and Product Polymers (5a−f, 6, 7a−f, and 8)

SciFinder^n
A CAS SOLUTION

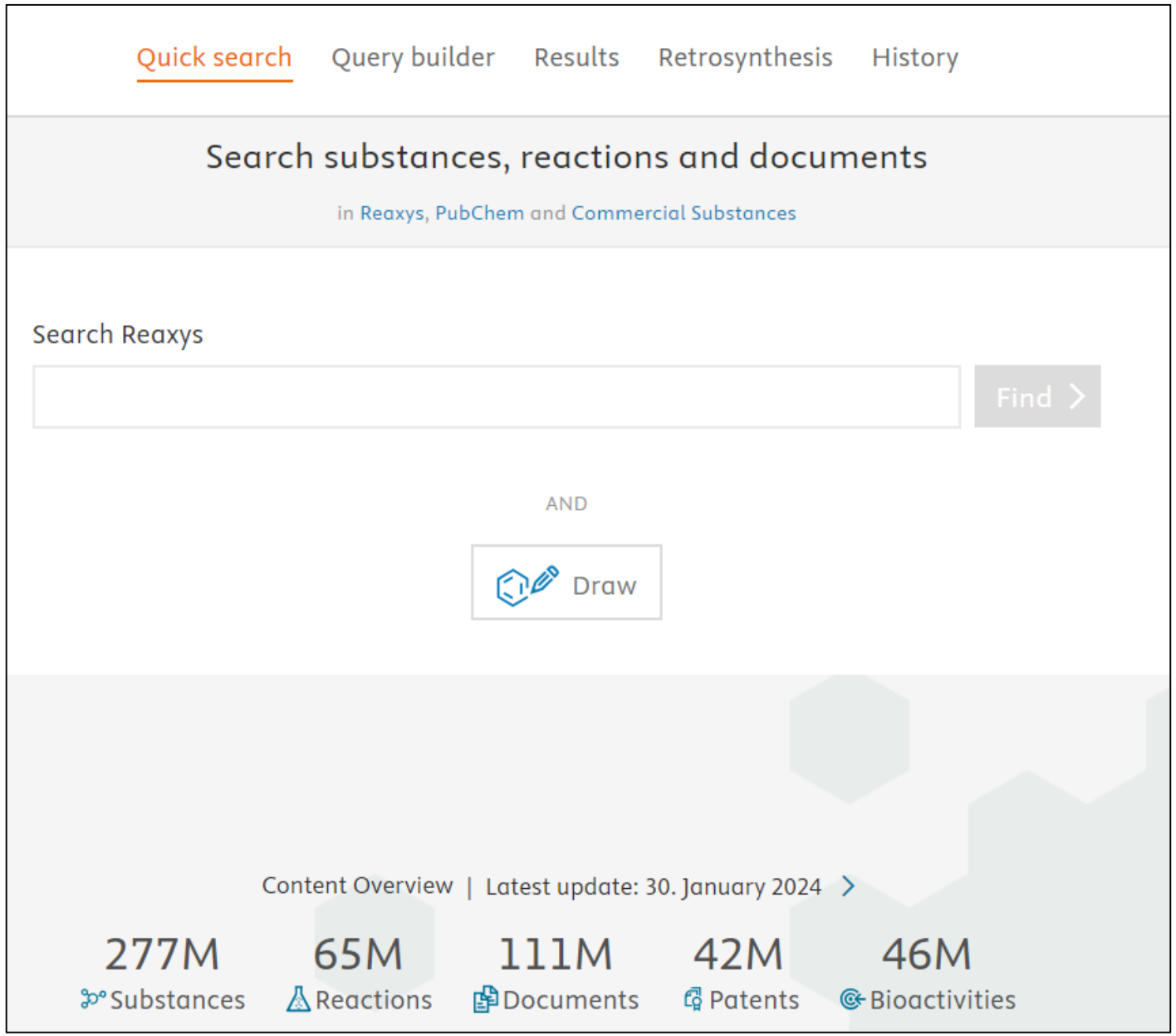


CAS SciFinder^n

What's new

- Brock Library subscribes!
- ORCiD IDs
- Embedded help pages and videos
- Text-driven Boolean searching
- Improved structure drawing and searching e.g. fragments
- Runs text searches based on Index terms and CAS Concepts
- Better search and history capabilities, alerts…
- More capabilities with smartphones, iPads, touchpads…
- PatentPak, MethodsNow Synthesis modules,
- Enhances AI-driven search logic, sorting, analysis, downloading…
- Includes MEDLINE citations

Reaxys®


Quick search
Query builder
Results
Retrosynthesis
History
Search substances, reactions and documents
in Reaxys, PubChem and Commercial Substances
Search Reaxys
Find
AND
Draw
Content Overview | Latest update: 30. January 2024
277M
Substances
65M
Reactions
111M
Documents
42M
Patents
46M
Bioactivities

Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers

Cited 2 times

Voigt, Laura J.; Tucker, Katie E.; Zelisko, Paul M. [**Biomacromolecules**, **2023**, vol. 24, # 8, p. 3463 - 3471]

Abstract Index Terms Substances 6 Full Text

Abstract hit: {...In DNA, thymine typically forms hydrogen bonds with adenine to hold two complementary...}

Index Terms

EMTREE drug term: polymer • thymine • hydrogen • silicone • silicone derivative

EMTREE medical term: nuclear magnetic resonance • cross linking • Article • differential scanning calorimetry • hydrogen bond • synthesis • controlled study • room temperature • contact angle • alkylation • chemical structure • proton nuclear magnetic resonance • column chromatography

Engineering uncontrolled terms: Polymer systems • Bond-breaking • Silicone polymers • Hydrogen bonding structures • Genetic code • Bio-inspired approach • Synthetic polymers • Complementary strand • Base pairing • Recyclables

Engineering controlled terms: Gene encoding • Silicones • Degradation • Crosslinking • Differential scanning calorimetry

Reaxys Index Terms: 13C NMR Spectrum • 13C NMR spectroscopy • 13C{1H}-NMR spectroscopy • 15N NMR spectroscopy • 195Pt NMR spectroscopy • 1H NMR spectroscopy • 29Si NMR spectroscopy • Fourier transform infrared spectroscopy • NMR spectroscopy • alkylation • chain reaction • charcoal • chemical stability • co-catalyst • column chromatography • contact angle with compound • cross linking • crosslink density • decolorization • differential scanning calorimetry • double bond • elastomer • electron density • elemental analysis • eluent • gravimetric analysis • heteronuclear multiple bond coherence • heteronuclear single quantum coherence • high resolution mass spectrometry (HRMS) • hydrogen bond • hydrogenation • hydrosilylation • insoluble • intermolecular force • mechanical strength • methylation • poison • polymer network • reaction stoichiometry • tensile strength • thermogravimetry • viscosity • vulcanization

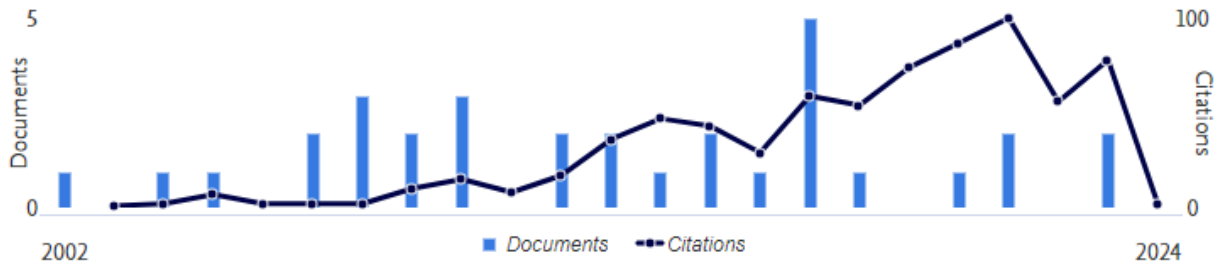
Zelisko, Paul Martin

Brock University, St. Catharines, Canada 6506258233 Connect to ORCID

731	32	11	View all metrics >
Citations by ***565 documents***	Documents	*h*-index View *h*-graph	

Set alert Edit profile ••• More

Document & citation trends



Scopus Preview

Scopus Preview users can only view a limited set of features. Check your institution's access to view all documents and features.

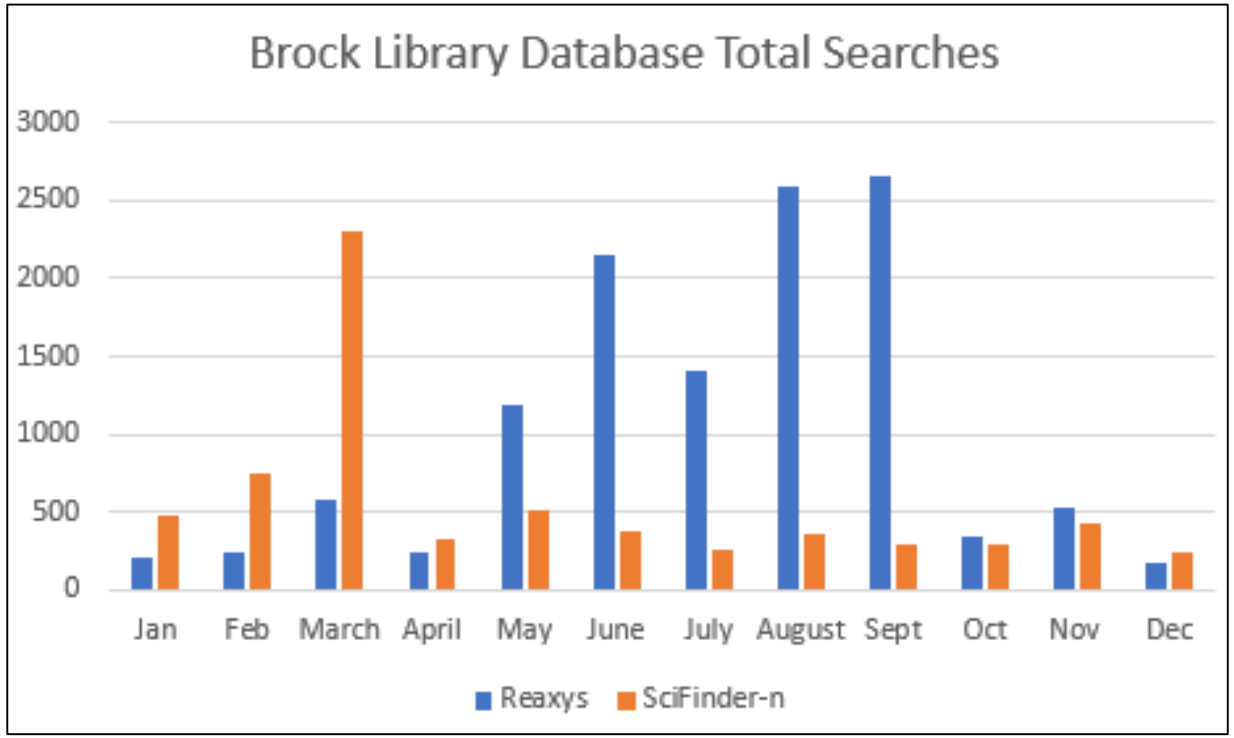
Check access

32 Documents Author Metrics (New) Cited by 565 documents 0 Preprints 49 Co-Authors 0 Topics 9 Awarded Grants (Beta)

Reaxys®

What's new

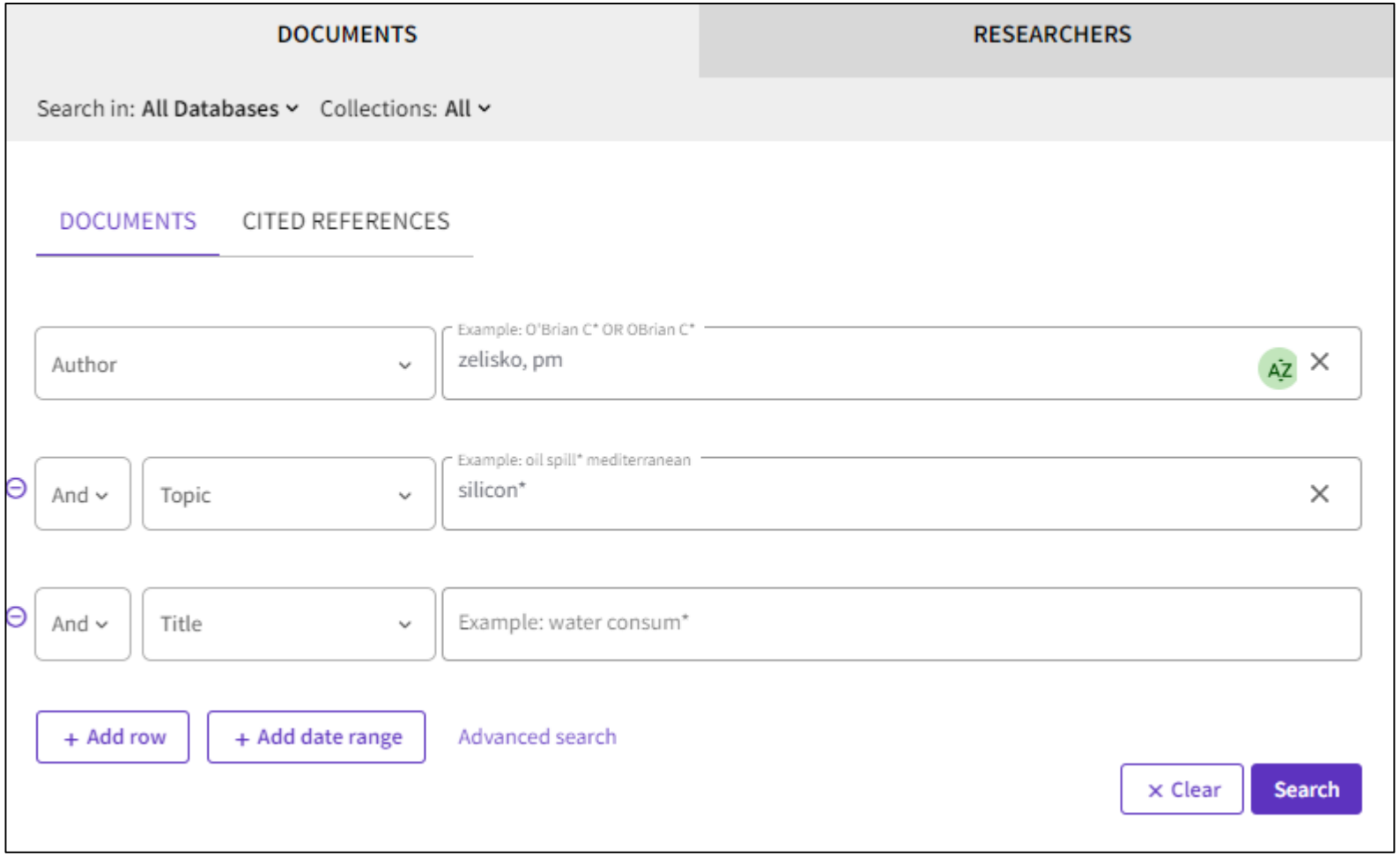
- More patents, journals, books, chapters, papers covered, content, biological targets, images…
- More filters to enable searching, reactions, substances…
- More citation management and cited by data
- Includes PubChem data
- Relational data filters are really helpful
- Retrosynthesis content although experimental, AI-enabled searching
- Brock Library subscribes!



2023
SciFinder-n total searches 6,586
Reaxys total searches 12,305

Reaxys
84 names users
2156 anonymous users
7,582 reaction searches
3,534 substance searches
82 retrosynthesis plans

Clarivate
Web of Science™



Paul Zelisko

(Zelisko, Paul M. M.)

Brock University

Web of Science ResearcherID: K-2101-2016

Published names Zelisko, Paul M. Zelisko, PM Zelisko, P. M. Zelisko, Paul Martin Zelisko, Paul Show more

Subject Categories BETA Chemistry; Polymer Science; Biochemistry & Molecular Biology; Materials Science; Biophysics

Other Identifiers https://orcid.org/0000-0002-3770-2562

Documents | Peer Review

49 Documents

Include publications not indexed in Core Collection (5) | All Publications | Date: newest first | 1 of 1

Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers

Voigt, Laura J. J. ; Tucker, Katie E. E. ; Zelisko, Paul M. M.

Published Jul 2023 | Biomacromolecules

2 Times Cited

Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers

By Voigt, LJ (Voigt, Laura J. J.) [1] ; Tucker, KE (Tucker, Katie E. E.) [1] , [2] ; Zelisko, PM (Zelisko, Paul M. M.) [1]

View Web of Science ResearcherID and ORCID (provided by Clarivate)

Source BIOMACROMOLECULES

Volume: 24 Issue: 8 Page: 3463-3471

DOI: 10.1021/acs.biomac.3c00185

Published JUL 28 2023

Early Access JUL 2023

Indexed 2023-08-10

Document Type Article

Abstract In DNA, thymine typically forms hydrogen bonds with adeninetohold two complementary strands together and to preserve the geneticcode. While thymine is typically absent in RNA, a thymine-thyminehydrogen bonding structure is reminiscent of the wobble region intRNA recognition, where noncanonical base pairing can occur. Thisnoncanonical base pairing can be applied to synthetic polymer systems,where thymine is free to hydrogen bond with itself. In this work,the natural hydrogen bonding capacity of thymine was used to producesilicone polymer systems designed to be cross-linked by hydrogen bonds.Backbone and end-group-modified silicones were synthesized with differingconcentrations of thymine, which facilitated the cross-linking ofthe polymeric strands. Removing the hydrogen on N3 □which istypically involved in hydrogen bonding □resulted in systemswith similar viscosities to the starting material and that were devoidof any apparent cross-links. Differential scanning calorimetry (DSC)studies of the thymine-modified polymers displayed thermal absorptionsand releases, indicative of bond breaking and reformation, around100 and 60 & DEG;C, respectively. The cycle of bond breaking and formationcould be repeated without any noticeable degradation of the chemicalstructure of the polymers. These polymeric materials could be readilyrecycled and remolded by heating them at 110 & DEG;C for 5 min, followedby cooling to room temperature, confirming their thermoplastic nature.

Keywords **Keywords Plus:** HYDROGEN-BONDS; ELASTOMER; COMPLEXES; NETWORKS

Citation Network

In All Databases

2 Citations

Create citation alert

2 Times Cited in All Databases

+ See more times cited

44 Cited References

View Related Records →

How does this document's citation performance compare to peers?

← Open comparison metrics panel New

Data is from InCites Benchmarking & Analytics

Citing items by classification New

Breakdown of how this article has been mentioned, based on available citation context data and snippets from 1 citing item(s).

Zelisko citation analysis

Export Full Report

Publications

44
Total

From 1900 to 2024

Citing Articles

529 Analyze
Total

502 Analyze
Without self-citations

Times Cited

698
Total

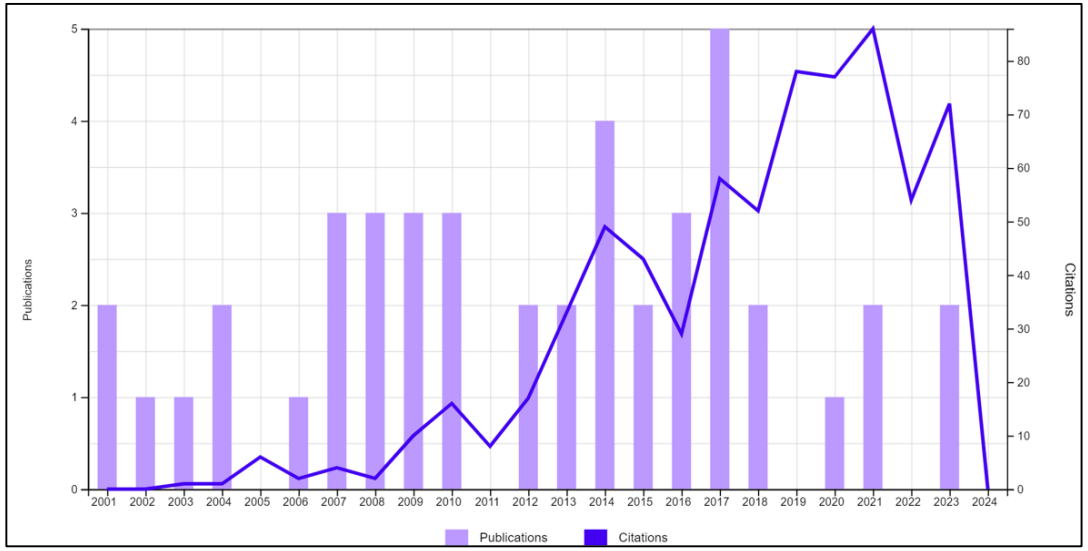
15.86
Average per item

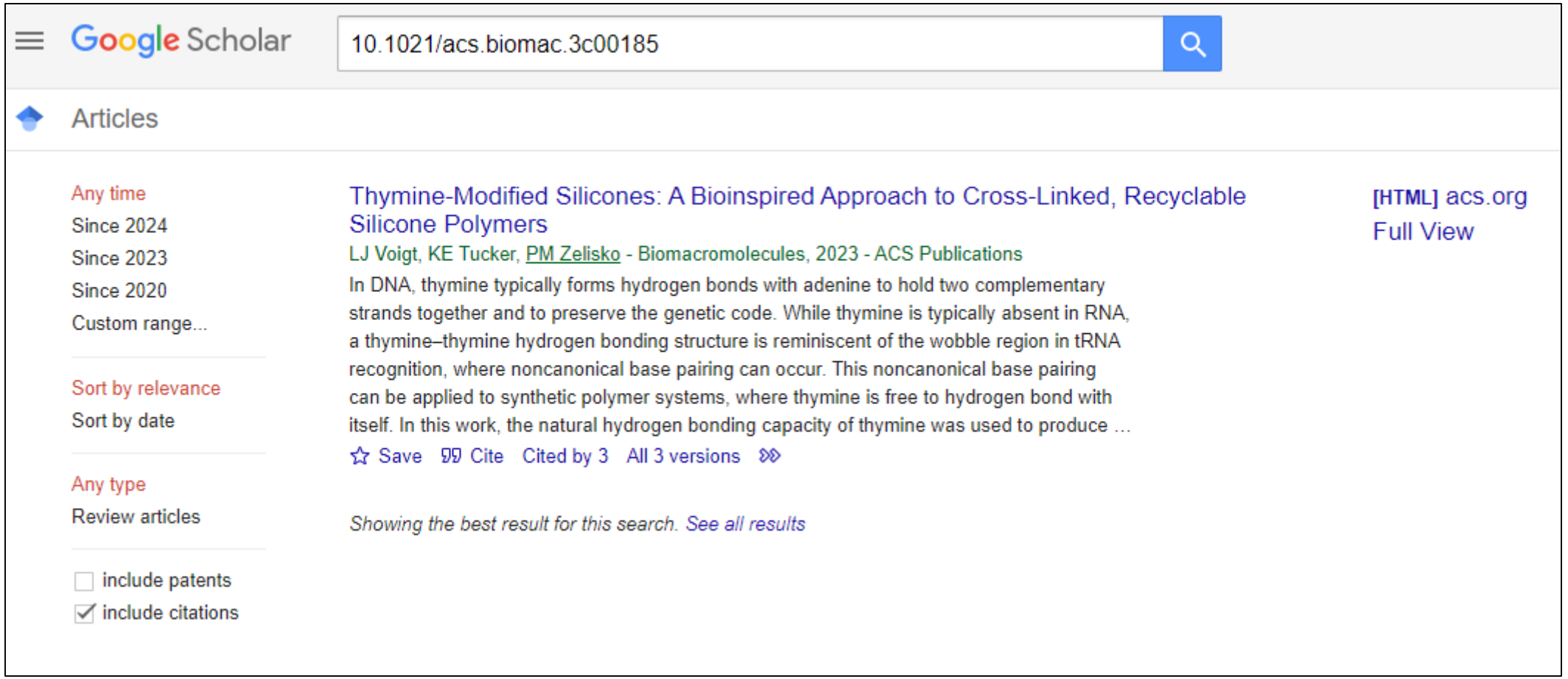
611
Without self-citations

H-Index

12

Select All	Field: Affiliations	Record Count	% of 528
☐	BROCK UNIVERSITY	47	8.902%
☐	MCMASTER UNIVERSITY	27	5.114%
☐	CHINESE ACADEMY OF SCIENCES	23	4.356%
☐	UNIVERSITY OF COPENHAGEN	21	3.977%
☐	UNITED STATES DEPARTMENT OF AGRICULTURE USDA	20	3.788%
☐	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	19	3.598%
☐	UNIVERSIDADE DE SAO PAULO	16	3.030%
☐	ZHEJIANG UNIVERSITY	14	2.652%
☐	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS CSIC	12	2.273%
☐	STATE UNIVERSITY SYSTEM OF FLORIDA	11	2.083%
☐	UNIVERSITY OF FLORIDA	11	2.083%
☐	RUSSIAN ACADEMY OF SCIENCES	10	1.894%
☐	CHINESE ACADEMY OF AGRICULTURAL SCIENCES	9	1.705%
☐	CONSIGLIO NAZIONALE DELLE RICERCHE CNR	9	1.705%
☐	INSTITUTE OF PLANT PROTECTION CAAS	9	1.705%
☐	UNIVERSITY OF CALIFORNIA SYSTEM	9	1.705%




Google Scholar
10.1021/acs.biomac.3c00185
Articles
Any time
Since 2024
Since 2023
Since 2020
Custom range...
Sort by relevance
Sort by date
Any type
Review articles
include patents
include citations
Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers
LJ Voigt, KE Tucker, PM Zelisko - Biomacromolecules, 2023 - ACS Publications
In DNA, thymine typically forms hydrogen bonds with adenine to hold two complementary strands together and to preserve the genetic code. While thymine is typically absent in RNA, a thymine–thymine hydrogen bonding structure is reminiscent of the wobble region in tRNA recognition, where noncanonical base pairing can occur. This noncanonical base pairing can be applied to synthetic polymer systems, where thymine is free to hydrogen bond with itself. In this work, the natural hydrogen bonding capacity of thymine was used to produce …
Save
Cite
Cited by 3
All 3 versions
[HTML] acs.org
Full View
Showing the best result for this search. See all results

Paul Zelisko

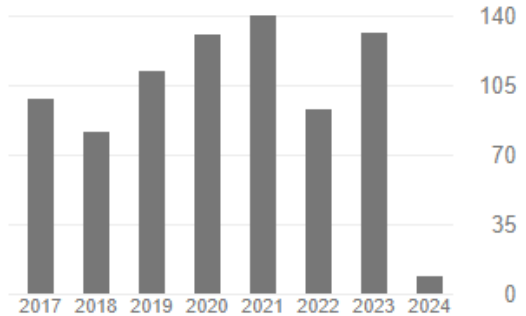
Brock University
Verified email at brocku.ca - Homepage
Silicon Chemistry

FOLLOW

TITLE	CITED BY	YEAR
Endophytic insect-parasitic fungi translocate nitrogen directly from insects to plants SW Behie, PM Zelisko, MJ Bidochka Science 336 (6088), 1576-1577	422	2012
Carbon translocation from a plant to an insect-pathogenic endophytic fungus SW Behie, CC Moreira, I Sementchoukova, L Barelli, PM Zelisko, ... Nature communications 8 (1), 14245	143	2017
Synthesis of a self-healing siloxane-based elastomer cross-linked via a furan-modified polyhedral oligomeric silsesquioxane: Investigation of a thermally reversible silicon ... A Nasresfahani, PM Zelisko Polymer Chemistry 8 (19), 2942-2952	59	2017
Stabilization of α-chymotrypsin and lysozyme entrapped in water-in-silicone oil emulsions PM Zelisko, MA Brook Langmuir 18 (23), 8982-8987	55	2002
Organosilicon biotechnology MB Frampton, PM Zelisko Silicon 1, 147-163	46	2009
Synthesis of lipase-catalysed silicone-polyesters and silicone-polyamides at elevated temperatures MB Frampton, PM Zelisko Chemical Communications 49 (81), 9269-9271	38	2013

Cited by VIEW ALL

	All	Since 2019
Citations	1147	617
h-index	14	10
i10-index	21	10



Public access VIEW ALL

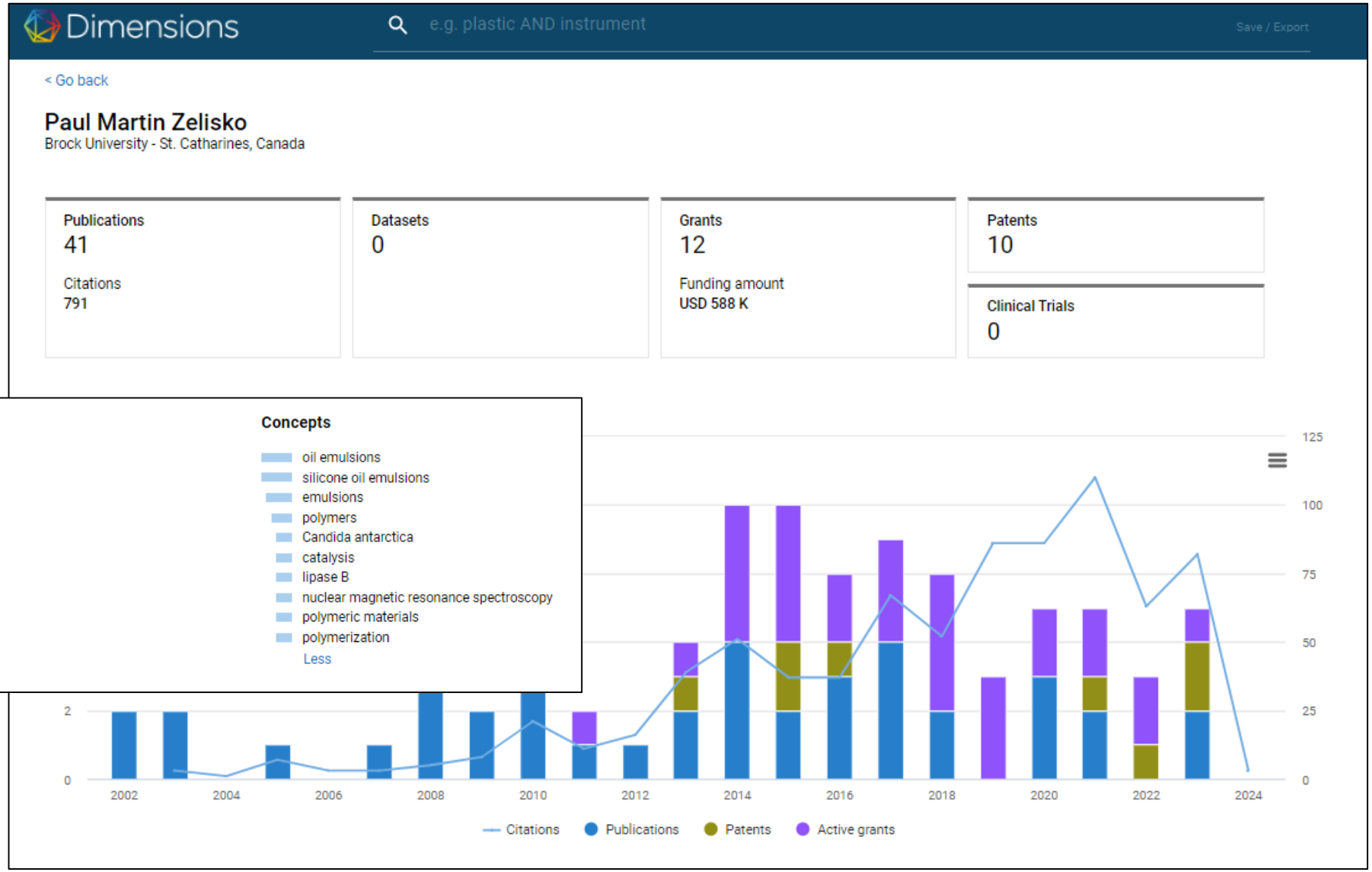
5 articles not available

8 articles available

Based on funding mandates

How do you measure the impact of your research?

https://www.dimensions.ai/



Academic Search Complete, Access Engineering, ArXiv.org, BASE, BioOne Complete, bioRxiv, ChEBI, ChEMBL, CHEMINFO, ChemRxiv, ChemSpider, Common Chemistry (ACS), Compendex, CORE, Dimensions, Directory of Open Access Journals (DOAJ), Education Source, Elicit, Embase, eMolecules, Espacenet, figshare, Google, Advanced Google, Google Books, Google Scholar, INSPEC, Keenious, MEDLINE via PubMed, MEDLINE via SciFinder-n, MEDLINE via PubMed, Omni, Open Alex, ORCiD, OSF Preprints, Oxford Reference, Paperity, PLOS, PubChem, ResearchGate, Reaxys, ResearchRabbit, Scholars Portal E-Journals, SciELO, SciFinder-n, Scite, Scilit, ~~Scopus~~, Semantic Scholar, The Lens, Web of Science Complete, Web of Science Core Collection, WorldWideScience.org, WorldCat, Zenodo…

Open
Subscription / Proprietary

Agenda

What's new in the library
Databases – lots of them
AI-driven innovation
Where, how and when to get help!

https://www.dreamstime.com/

While AI is powerful, it is limited in several significant ways. Many implementations of generative AI are hampered by a lack of [chemical] / suitable data and an inability to accept different input data types (p. 34).

Jin Xuan, & Daniel, T. (2023). The Future of Chemical Engineering in the Era of Generative AI. TCE: *The Chemical Engineer*, 988, 34–35.

In the realm of medicinal chemistry, AI has shown promising results in the discovery of new chemical scaffolds with therapeutic potential. It has the capacity to scrutinize vast chemical spaces and extract meaningful patterns, thereby significantly reducing the time required for identifying potential drug candidates (p.2)

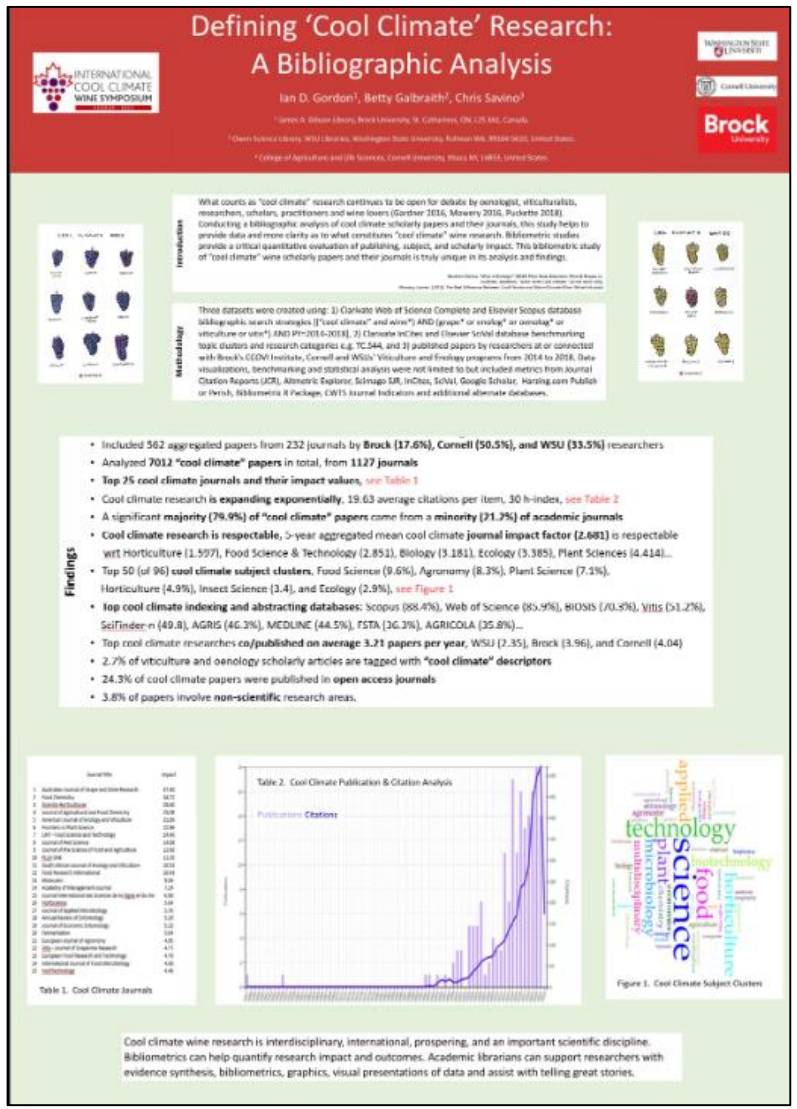
Han, R., Yoon, H., Kim, G., Lee, H., & Lee, Y. (2023). Revolutionizing medicinal chemistry: The application of artificial intelligence (Ai) in early drug discovery. *Pharmaceutical*s, 16(9), 1259. https://doi.org/10.3390/ph16091259

It is noticeable that collaborations in the field of research and development that include major pharmaceutical companies and emerging drug discovery companies that rely on artificial intelligence are increasing.

Amin A El-Meligi, 2023 *Future of chemistry in the presence of artificial intelligence.* South African Journal of Chemistry, 77, http://dx.doi.org/10.17159/0379-4350/2023/v77a19 150-156

Do you own the copyright and licensing for your creative content?

https://archive.org/


Defining 'Cool Climate' Research:
A Bibliographic Analysis
Ian D. Gordon[1], Betty Galbraith[2], Chris Savino[3]
Brock
Findings
Table 1. Cool Climate Journals
Table 2. Cool Climate Publication & Citation Analysis
Publications Citations
Figure 1. Cool Climate Subject Clusters
Cool climate wine research is interdisciplinary, international, prospering, and an important scientific discipline. Bibliometrics can help quantify research impact and outcomes. Academic librarians can support researchers with evidence synthesis, bibliometrics, graphics, visual presentations of data and assist with telling great stories.

Defining Cool Climate Research: A Bibliographic Analysis

by Ian D. Gordon

Publication date	2022-07-12
Usage	Attribution-NoDerivatives 4.0 International
Topics	Cool climate, bibliometrics, wine, viticulture, oenology, libraries
Collection	opensource
Language	English

Poster presented at the International Cool Climate Symposium held at Brock University, St. Catharines, Ontario, Canada, July 17-21, 2022. Poster created and presented by Ian D. Gordon, Brock University, Betty Balbraith, Washington State University, and Chris Savino, Cornell University.

Addeddate	2022-07-12 19:22:05
Identifier	gordon-galbraith-savino-defining-cool-climate-research-a-bibliographic-analysis-
Identifier-ark	ark:/13960/s299rpb7d7j
Ocr	tesseract 5.1.0-1-ge935
Ocr_detected_lang	en
Ocr_detected_lang_conf	1.0000
Ocr_detected_script	Latin
Ocr_detected_script_conf	1.0000
Ocr_module_version	0.0.16
Ocr_parameters	-l eng
Ppi	300
Scanner	Internet Archive HTML5 Uploader 1.6.4

Do you have a data management plan?

https://brocku.ca/library/rdm/

Research Data Management

Planning, managing, and maintaining data that is collected or created through research is a critical part of the research process. The Library provides expertise, support and access to resources that enable researchers to manage their research data in effective and efficient ways.

Brock University Research Data Management Strategy

The Government of Canada's Tri-Agency Research Data Management Policy requires Brock University, as an institution that administers CIHR, NSERC, or SSHRC funds, to develop and publish an RDM Strategy on the Brock University website by March 1, 2023. Brock University followed a consultative and inclusive process to develop this Strategy.

GO TO BROCK UNIVERSITY STRATEGY ›

Tri-Agency Research Data Management Policy

The agencies believe that research data collected through the use of public funds should be responsibly and securely managed and be, where ethical, legal and commercial obligations allow, available for reuse by others. To this end, the agencies support the FAIR (Findable, Accessible, Interoperable, and Reusable) guiding principles for research data management and stewardship. ~Government of Canada

GO TO TRI-AGENCY POLICY ›

Library Support

Planning, managing, and maintaining data that is collected or created through research is a critical part of the research process. This guide provides an introduction to the key questions you need to answer about your data, links to other resources for more information, and details about data hosting options.

GO TO LIBRARY GUIDE ›

How do you anticipate visualizing your data?

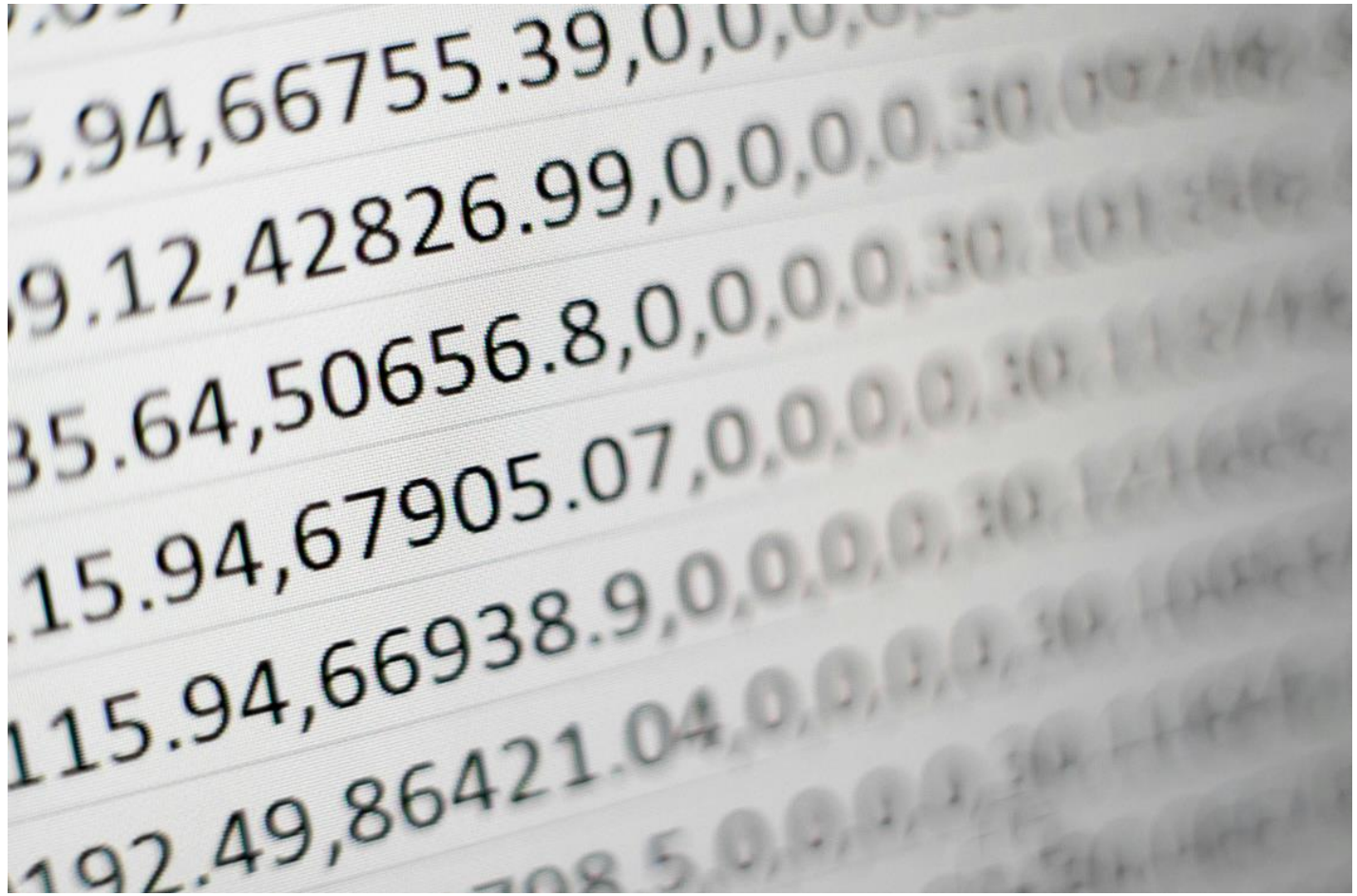


Photo by Mika Baumeister on Unsplash

https://brocku.ca/library/dsl/

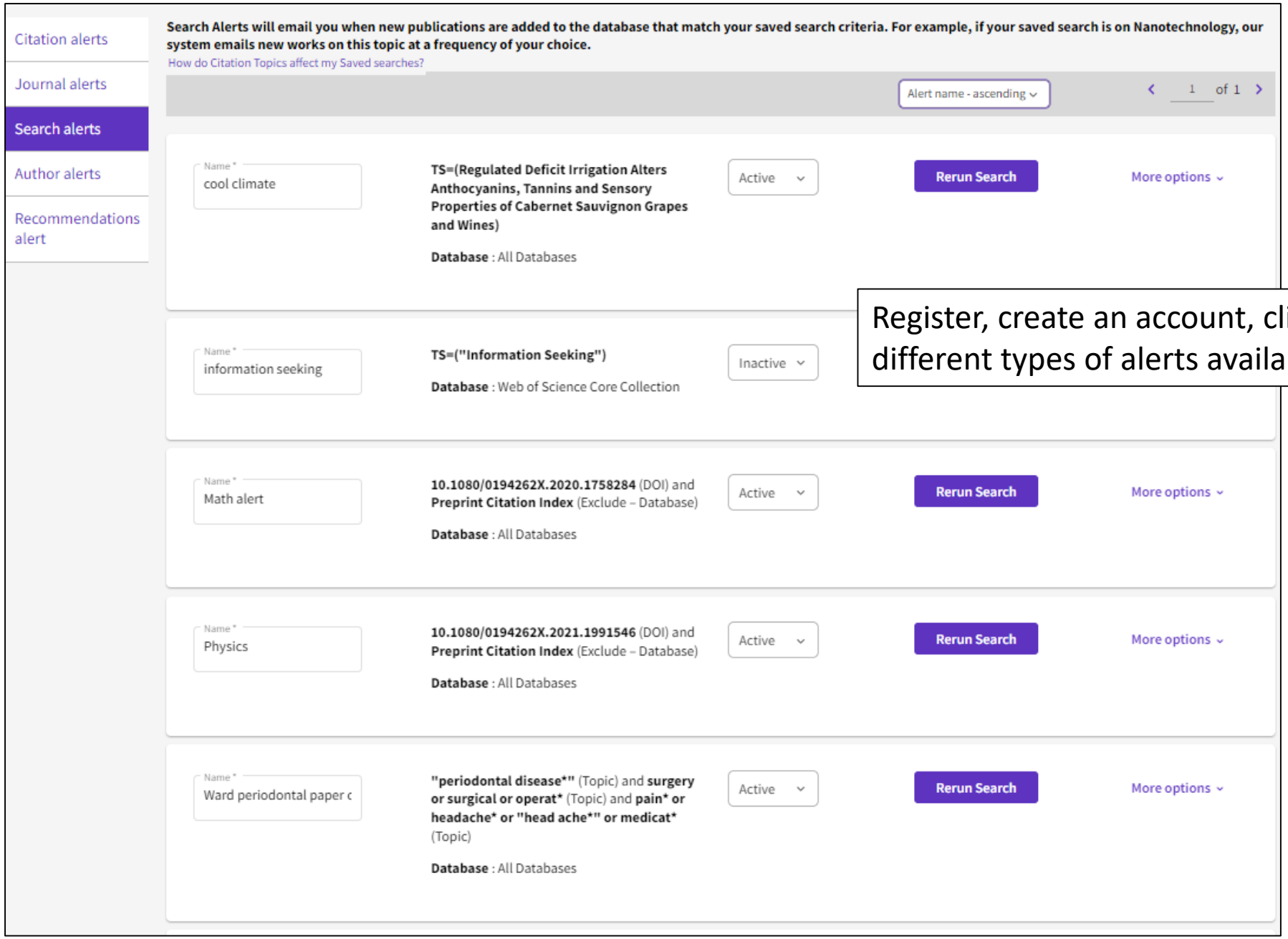
Digital Scholarship Lab

We Can Help You With:

- Managing Your Research Data
- Developing Your Digital Project
- Finding And Using Data
- Visualizing Your Data
- Mapping Your Data (GIS)
- Processing Your Data (HPC)

The Digital Scholarship Lab brings together a variety of services and expertise that support digital research initiatives happening across Brock University.

Have you created any database citation alerts to remain current?

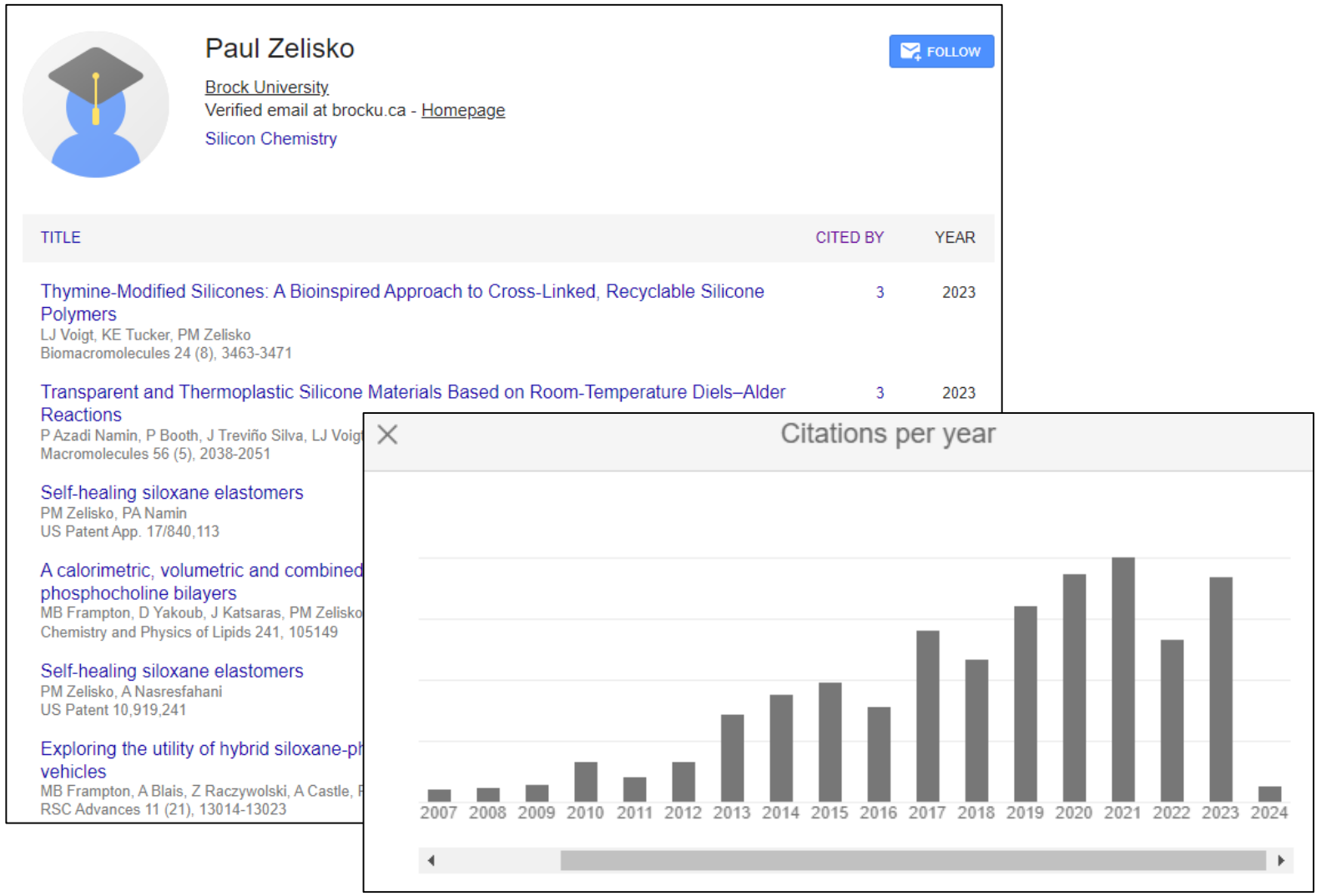

Citation alerts
Journal alerts
Search alerts
Author alerts
Recommendations alert
Search Alerts will email you when new publications are added to the database that match your saved search criteria. For example, if your saved search is on Nanotechnology, our system emails new works on this topic at a frequency of your choice.
How do Citation Topics affect my Saved searches?
Alert name - ascending
1 of 1
Name * cool climate
TS=(Regulated Deficit Irrigation Alters Anthocyanins, Tannins and Sensory Properties of Cabernet Sauvignon Grapes and Wines)
Database : All Databases
Active
Rerun Search
More options
Name * information seeking
TS=("Information Seeking")
Database : Web of Science Core Collection
Inactive
Name * Math alert
10.1080/0194262X.2020.1758284 (DOI) and Preprint Citation Index (Exclude – Database)
Database : All Databases
Active
Rerun Search
More options
Name * Physics
10.1080/0194262X.2021.1991546 (DOI) and Preprint Citation Index (Exclude – Database)
Database : All Databases
Active
Rerun Search
More options
Name * Ward periodontal paper c
"periodontal disease*" (Topic) and surgery or surgical or operat* (Topic) and pain* or headache* or "head ache*" or medicat* (Topic)
Database : All Databases
Active
Rerun Search
More options

Register, create an account, click on “Create Alert”, different types of alerts available…

Have you created a social media profile to promote your research?

https://scholar.google.ca/

Google Scholar



Paul Zelisko

FOLLOW

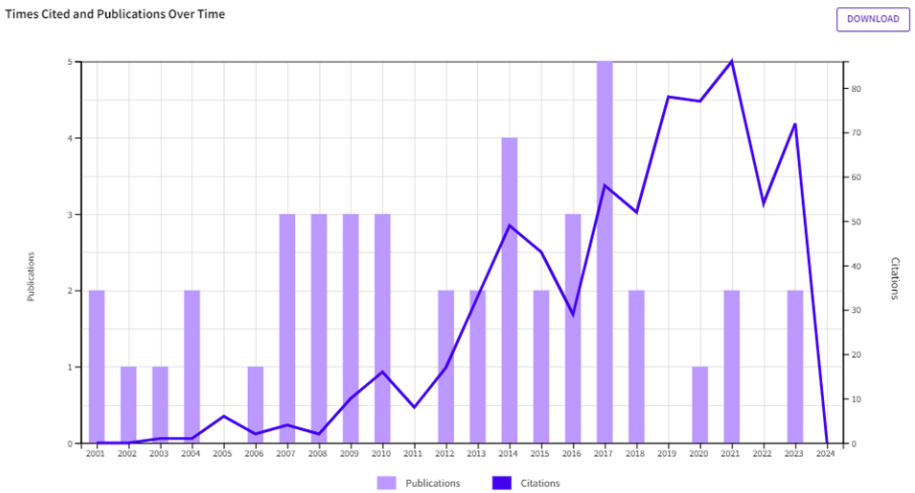
Brock University
Verified email at brocku.ca - Homepage
Silicon Chemistry

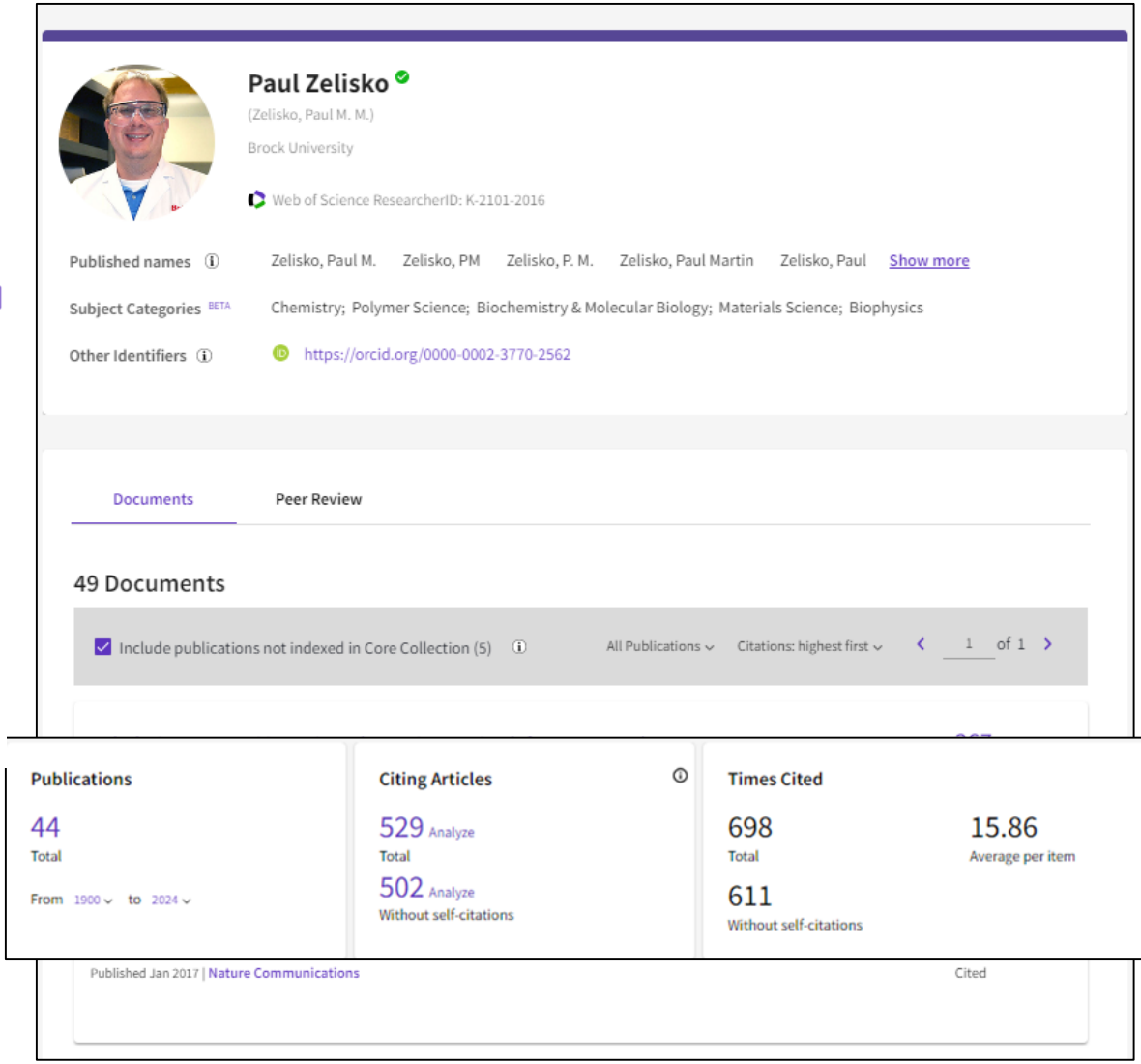
TITLE	CITED BY	YEAR
Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers LJ Voigt, KE Tucker, PM Zelisko Biomacromolecules 24 (8), 3463-3471	3	2023
Transparent and Thermoplastic Silicone Materials Based on Room-Temperature Diels–Alder Reactions P Azadi Namin, P Booth, J Treviño Silva, LJ Voigt Macromolecules 56 (5), 2038-2051	3	2023
Self-healing siloxane elastomers PM Zelisko, PA Namin US Patent App. 17/840,113		
A calorimetric, volumetric and combined phosphocholine bilayers MB Frampton, D Yakoub, J Katsaras, PM Zelisko Chemistry and Physics of Lipids 241, 105149		
Self-healing siloxane elastomers PM Zelisko, A Nasresfahani US Patent 10,919,241		
Exploring the utility of hybrid siloxane-ph vehicles MB Frampton, A Blais, Z Raczywolski, A Castle, P RSC Advances 11 (21), 13014-13023		

Citations per year

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Clarivate
Web of Science™





Showing 25 out of 273 entries

Select All	Field: Publication Titles	Record Count	% of 528
☐	FRONTIERS IN MICROBIOLOGY	15	2.841%
☐	FUNGAL ECOLOGY	15	2.841%
☐	PLOS ONE	15	2.841%
☐	APPLIED MICROBIOLOGY AND BIOTECHNOLOGY	9	1.705%
☐	BIOLOGICAL CONTROL	9	1.705%
☐	FUNGAL BIOLOGY	8	1.515%
☐	SILICON	8	1.515%
☐	POLYMERS	7	1.326%
☐	SCIENTIFIC REPORTS	7	1.326%
☐	BIOMACROMOLECULES	6	1.136%
☐	JOURNAL OF FUNGI	6	1.136%
☐	JOURNAL OF INVERTEBRATE PATHOLOGY	6	1.136%
☐	POLYMER CHEMISTRY	6	1.136%
☐	BIOCONTROL SCIENCE AND TECHNOLOGY	5	0.947%
☐	BIOMATERIALS	5	0.947%

https://www.scopus.com/

Scopus®

Your Name Here

View potential author matches

Affiliation(s):

MU College of Veterinary Medicine, Columbia, United States View more

Subject area: Veterinary | Biochemistry, Genetics and Molecular Biology | Medicine | Pharmacology, Toxicology and Pharmaceutics | Agricultural and Biological Sciences | Chemical Engineering | Chemistry | Neuroscience | Immunology and Microbiology

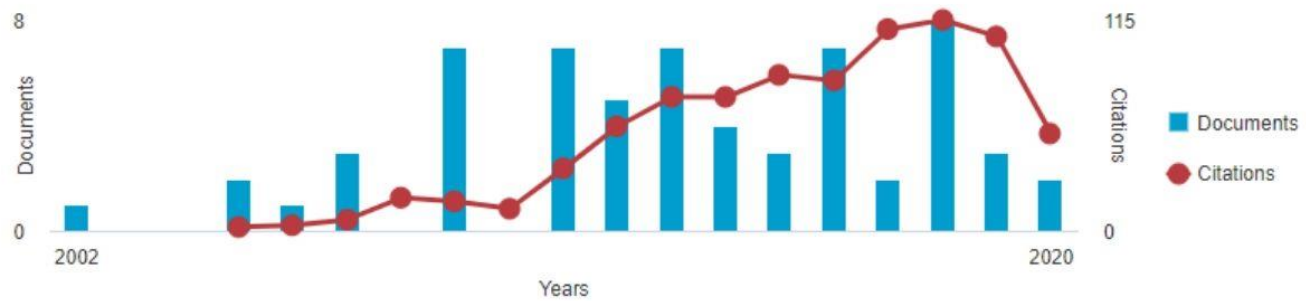
View all

Documents by author
62

Total citations
845 by 802 documents

h-index:
15

Document and citation trends:



Profile actions

Edit author profile

Connect to ORCID

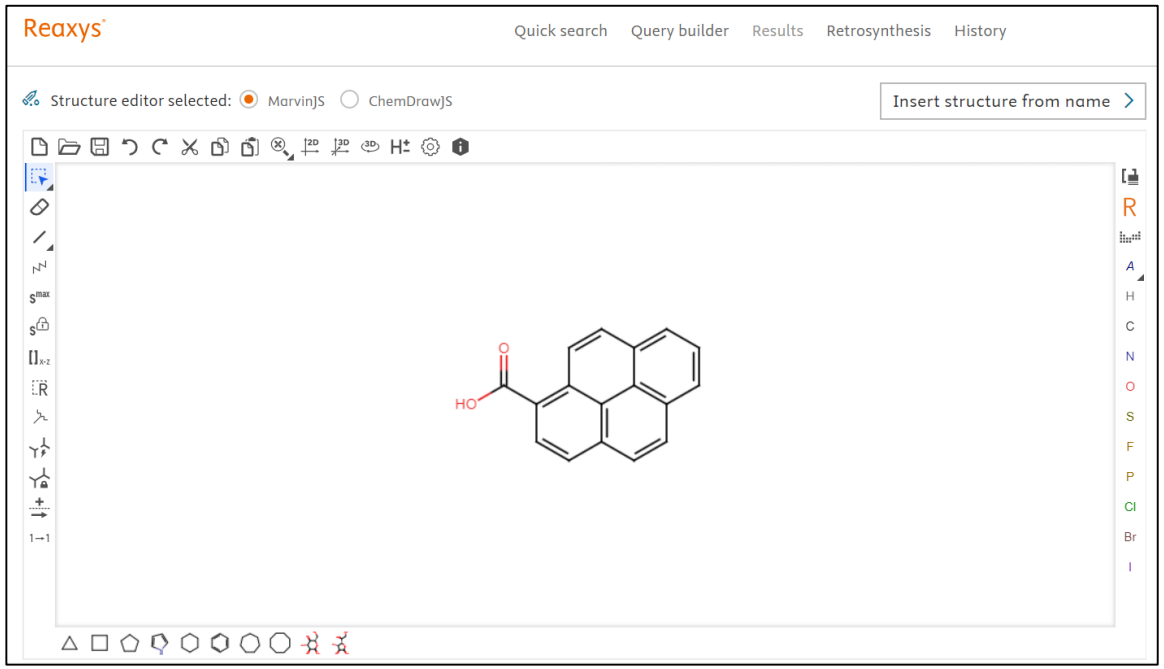
Alerts
Set citation alert
Set document alert

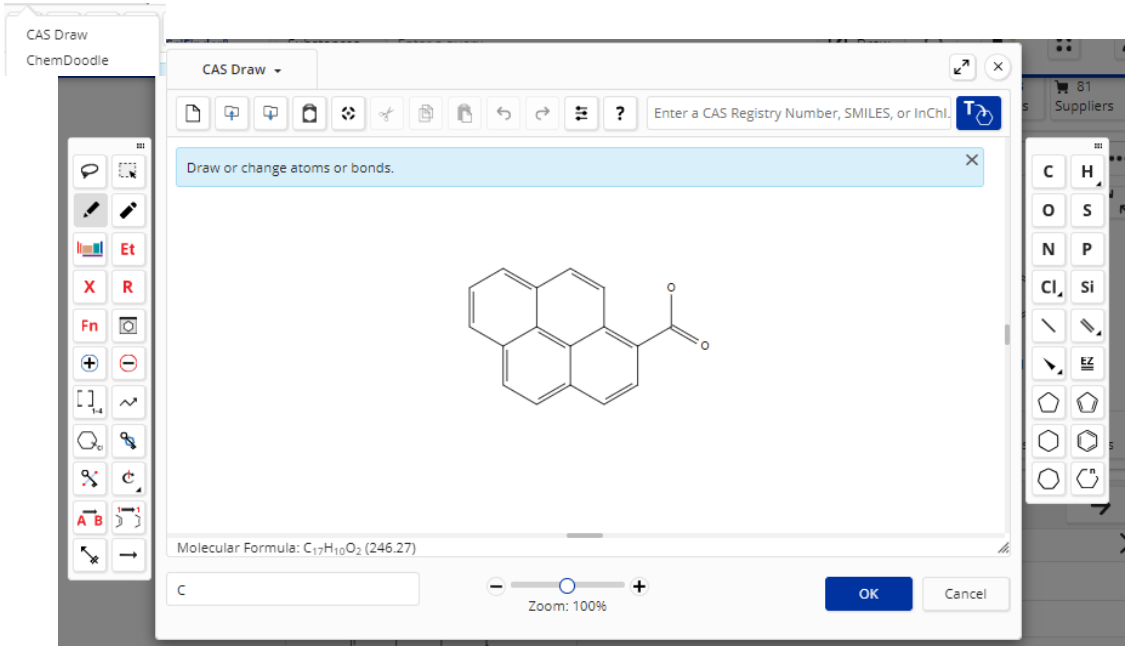
Learn more about Scopus Profiles

62 Documents

View Mendeley profile

How do you draw, save and insert structures?

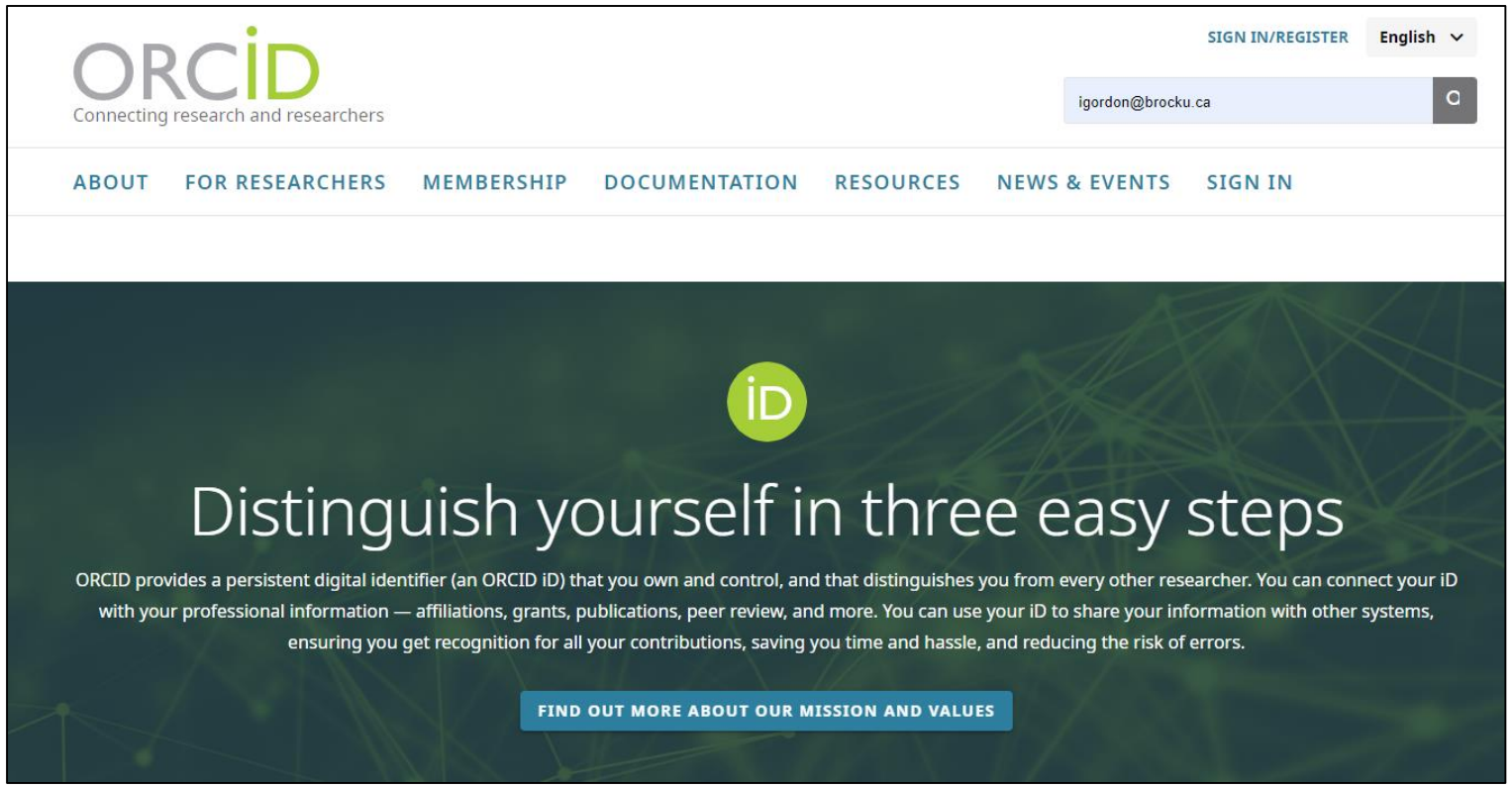

Reaxys
Quick search
Query builder
Results
Retrosynthesis
History
Structure editor selected:
MarvinJS
ChemDrawJS
Insert structure from name
HO
O


CAS Draw
ChemDoodle
CAS Draw
Enter a CAS Registry Number, SMILES, or InChI.
Draw or change atoms or bonds.
Molecular Formula: C17H10O2 (246.27)
C
Zoom: 100%
OK
Cancel
81
Suppliers

CD

Do you have an ORCiD ID?

https://orcid.org/


ORCID
Connecting research and researchers
SIGN IN/REGISTER
English
igordon@brocku.ca
ABOUT
FOR RESEARCHERS
MEMBERSHIP
DOCUMENTATION
RESOURCES
NEWS & EVENTS
SIGN IN
iD
Distinguish yourself in three easy steps
ORCID provides a persistent digital identifier (an ORCID iD) that you own and control, and that distinguishes you from every other researcher. You can connect your iD with your professional information — affiliations, grants, publications, peer review, and more. You can use your iD to share your information with other systems, ensuring you get recognition for all your contributions, saving you time and hassle, and reducing the risk of errors.
FIND OUT MORE ABOUT OUR MISSION AND VALUES

Have you created a social media profile to promote your research?

https://www.researchgate.net

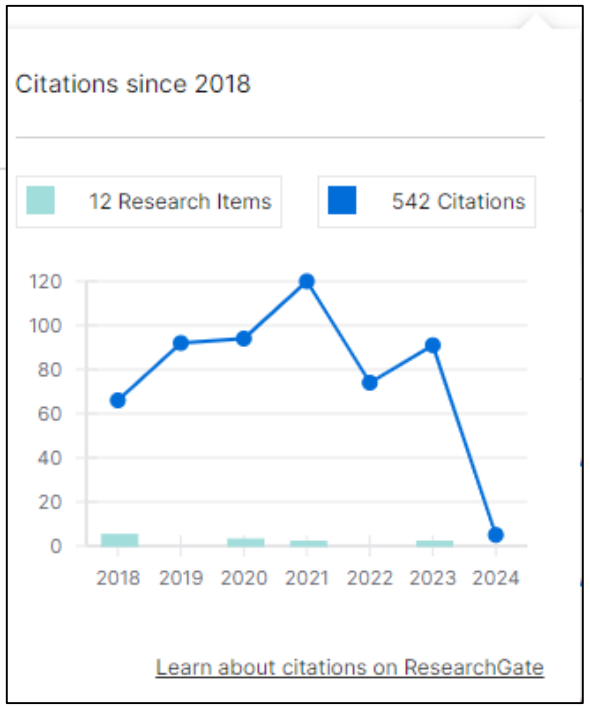
Paul M. Zelisko

PhD · Professor (Associate) at Brock University

Canada

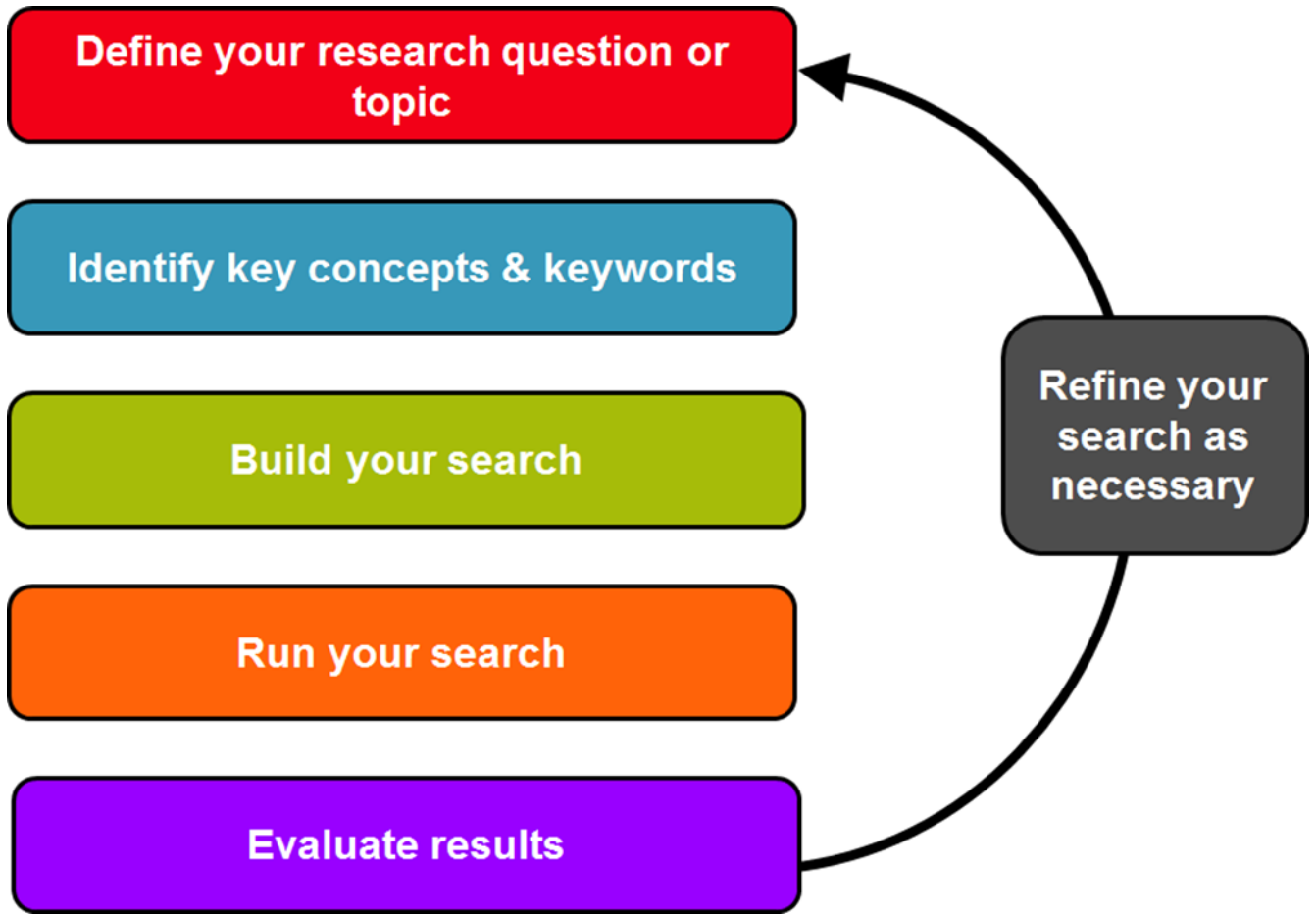
Research Interest Score	486.1
Citations	913
h-index	13

Profile Research (59) Stats



TIPS

- Search Google / Advanced Google / Google Scholar first
- Create a search strategy plan
- Define your terms, researchers, substances, reactions, citations…
- Document your search logic including boundaries of databases/date/language/format
- Start early – searching and evaluating resources is an iterative process
- Be flexible – serendipity is a research methodology
- Save your search strategies, create alerts
- Identify key papers/authors/searches and forward search for new citations
- Invest in using zoterobib and Zotero citation management software
- Book a consultation if needed – we can help


Define your research question or topic
Identify key concepts & keywords
Build your search
Run your search
Evaluate results
Refine your search as necessary

Library Seminar Agenda

- Research Metrics
- Qualitative stuff
- Databases – lots of them
- Citation Management tools
- Where, how and when to get help!

zotero

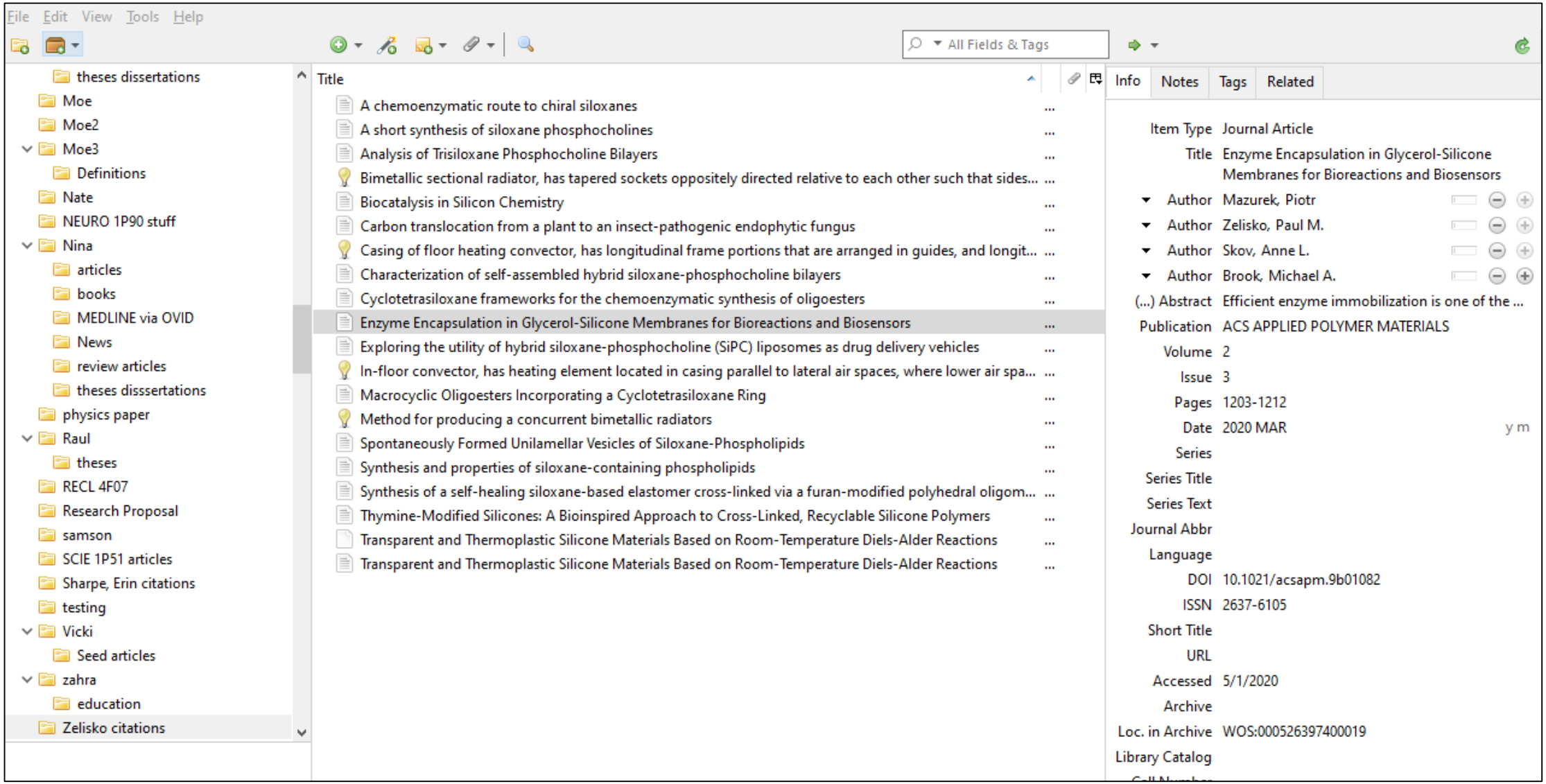
https://www.zotero.org/

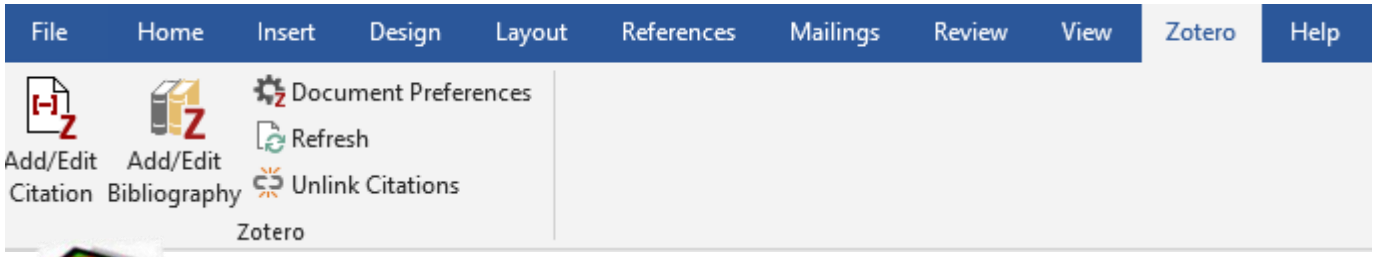
zoterobib

https://zbib.org/

Citation Management
https://researchguides.library.brocku.ca/citationmanagement

Style Guides
https://researchguides.library.brocku.ca/styleguides


File Edit View Tools Help
All Fields & Tags
theses dissertations
Moe
Moe2
Moe3
Definitions
Nate
NEURO 1P90 stuff
Nina
articles
books
MEDLINE via OVID
News
review articles
theses disssertations
physics paper
Raul
theses
RECL 4F07
Research Proposal
samson
SCIE 1P51 articles
Sharpe, Erin citations
testing
Vicki
Seed articles
zahra
education
Zelisko citations
Title
A chemoenzymatic route to chiral siloxanes
A short synthesis of siloxane phosphocholines
Analysis of Trisiloxane Phosphocholine Bilayers
Bimetallic sectional radiator, has tapered sockets oppositely directed relative to each other such that sides...
Biocatalysis in Silicon Chemistry
Carbon translocation from a plant to an insect-pathogenic endophytic fungus
Casing of floor heating convector, has longitudinal frame portions that are arranged in guides, and longit...
Characterization of self-assembled hybrid siloxane-phosphocholine bilayers
Cyclotetrasiloxane frameworks for the chemoenzymatic synthesis of oligoesters
Enzyme Encapsulation in Glycerol-Silicone Membranes for Bioreactions and Biosensors
Exploring the utility of hybrid siloxane-phosphocholine (SiPC) liposomes as drug delivery vehicles
In-floor convector, has heating element located in casing parallel to lateral air spaces, where lower air spa...
Macrocyclic Oligoesters Incorporating a Cyclotetrasiloxane Ring
Method for producing a concurrent bimetallic radiators
Spontaneously Formed Unilamellar Vesicles of Siloxane-Phospholipids
Synthesis and properties of siloxane-containing phospholipids
Synthesis of a self-healing siloxane-based elastomer cross-linked via a furan-modified polyhedral oligom...
Thymine-Modified Silicones: A Bioinspired Approach to Cross-Linked, Recyclable Silicone Polymers
Transparent and Thermoplastic Silicone Materials Based on Room-Temperature Diels-Alder Reactions
Transparent and Thermoplastic Silicone Materials Based on Room-Temperature Diels-Alder Reactions
Info
Notes
Tags
Related
Item Type Journal Article
Title Enzyme Encapsulation in Glycerol-Silicone Membranes for Bioreactions and Biosensors
Author Mazurek, Piotr
Author Zelisko, Paul M.
Author Skov, Anne L.
Author Brook, Michael A.
(...) Abstract Efficient enzyme immobilization is one of the ...
Publication ACS APPLIED POLYMER MATERIALS
Volume 2
Issue 3
Pages 1203-1212
Date 2020 MAR
y m
Series
Series Title
Series Text
Journal Abbr
Language
DOI 10.1021/acsapm.9b01082
ISSN 2637-6105
Short Title
URL
Accessed 5/1/2020
Archive
Loc. in Archive WOS:000526397400019
Library Catalog



CHEM Thesis Proposal

Ian D. Gordon

Silicon chemistry is amazing and is the next big thing (Mazurek et al. 2020) for bioreactions…

References

Mazurek, P.; Zelisko, P. M.; Skov, A. L.; Brook, M. A. Enzyme Encapsulation in Glycerol–Silicone Membranes for Bioreactions and Biosensors. *ACS Appl. Polym. Mater*. **2020**, 2 (3), 1203–1212. https://doi.org/10.1021/acsapm.9b01082.

Library Seminar Agenda

- Research Metrics
- Qualitative stuff
- Databases – lots of them
- Citation Management tools
- Where, how and when to get help!

https://www.cas.org/contact

CAS
A DIVISION OF THE
AMERICAN CHEMICAL SOCIETY

CAS Customer Center

Contact the CAS Customer Center if you have questions or need additional information about any CAS solution or service including product features, account inquiries, set-up or access, formulating a search strategy, etc. If you are outside of North America, scroll down to select your region.

Hours: Monday 8:00 a.m. – Friday 12:00 a.m. EST (midnight)

Email: help@cas.org

Phone: 1 800.753.4227 (North America), +1 614.447.3731 (if calling outside of the United States)

https://service.elsevier.com/app/home/supporthub/reaxys/

ELSEVIER

Reaxys Support Center

USA, Canada and Latin America

Contact number	Opening times
+1 800 543 6820 (US Toll Free)	Monday to Friday 9.00am-5.00pm Central Standard Time

For further assistance:

Email

Chat

Phone

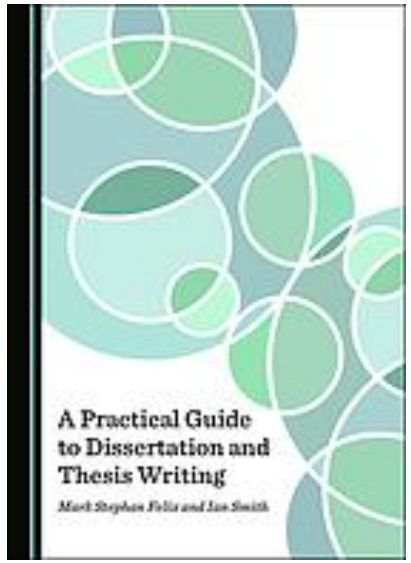
grammarly

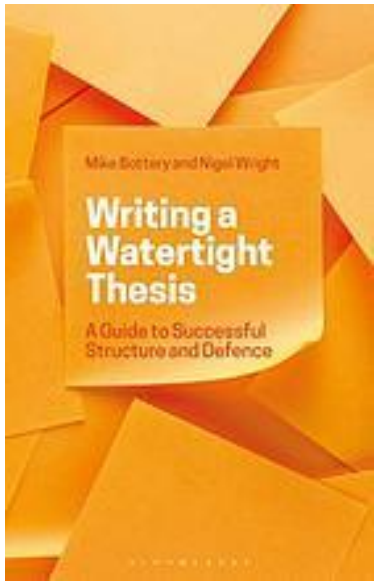
MANCHESTER 1824
The University of Manchester

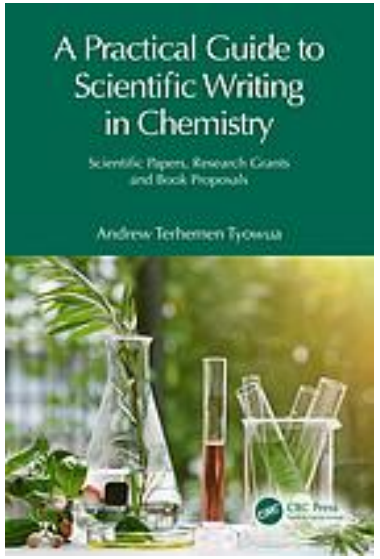
Academic Phrasebank

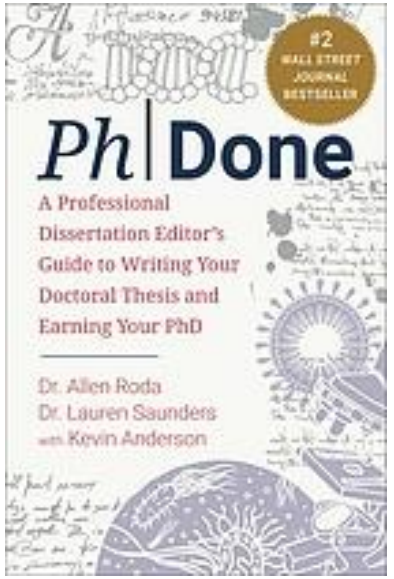
GrammarBook.com
Your #1 Source for Grammar and Punctuation

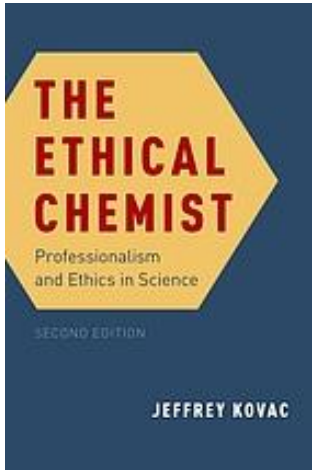
ProWritingAid


A Practical Guide to Dissertation and Thesis Writing
Mark Stephen Felix and Ian Smith

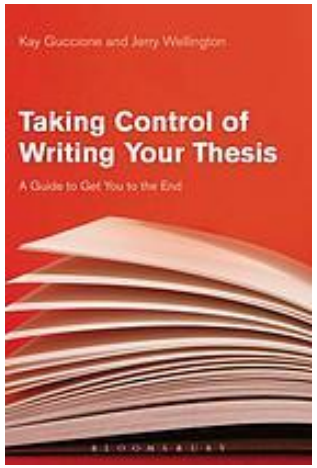

Mike Bottery and Nigel Wright
Writing a Watertight Thesis
A Guide to Successful Structure and Defence

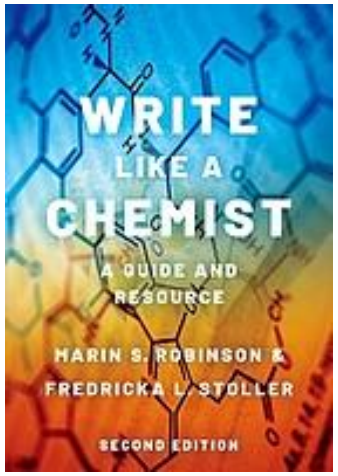

A Practical Guide to Scientific Writing in Chemistry
Scientific Papers, Research Grants and Book Proposals
Andrew Terhemen Tyowua
CRC Press

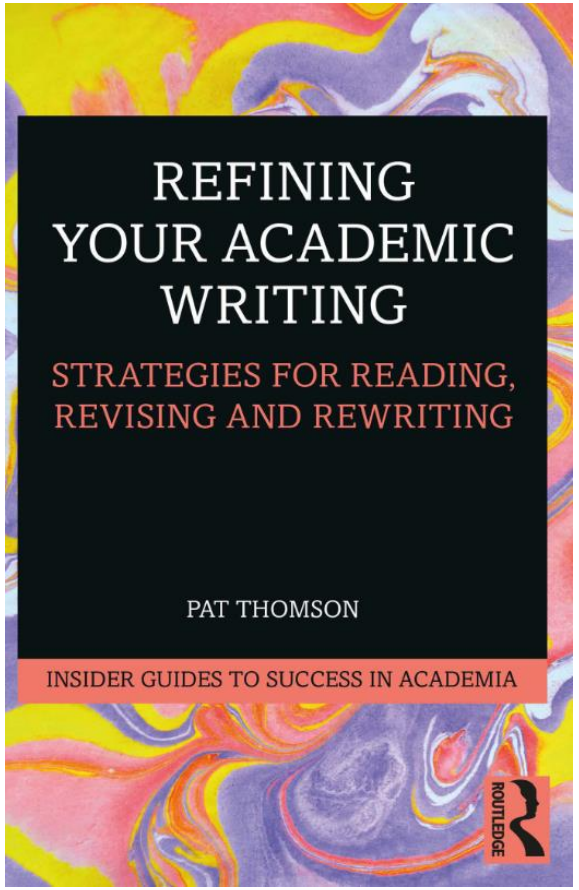

#2 WALL STREET JOURNAL BESTSELLER
PhDone
A Professional Dissertation Editor's Guide to Writing Your Doctoral Thesis and Earning Your PhD
Dr. Allen Roda
Dr. Lauren Saunders
with Kevin Anderson

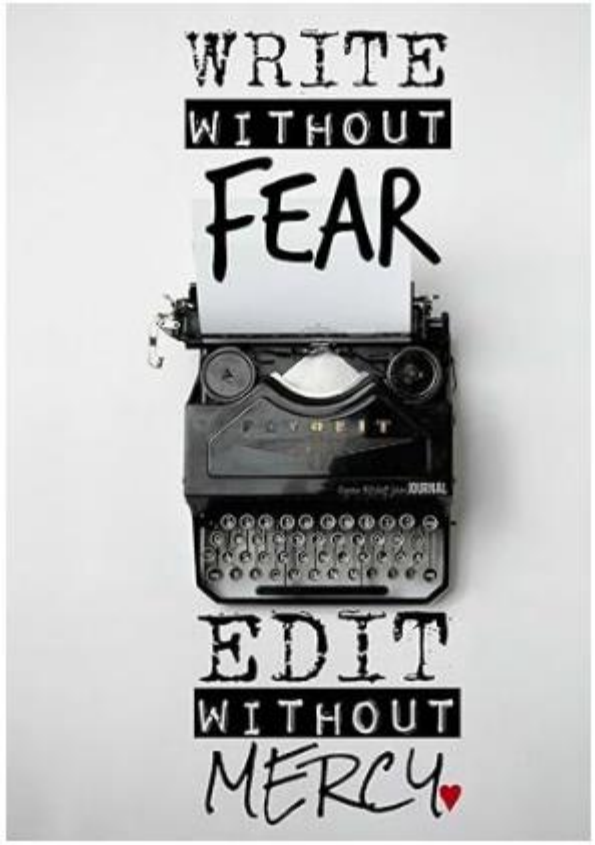

THE ETHICAL CHEMIST
Professionalism and Ethics in Science
SECOND EDITION
JEFFREY KOVAC

Good Chemistry
Methodological, Ethical, and Social Dimensions


Kay Guccione and Jerry Wellington
Taking Control of Writing Your Thesis
A Guide to Get You to the End


WRITE LIKE A CHEMIST
A GUIDE AND RESOURCE
MARIN S. ROBINSON & FREDRICKA L. STOLLER
SECOND EDITION


REFINING
YOUR ACADEMIC
WRITING
STRATEGIES FOR READING,
REVISING AND REWRITING
PAT THOMSON
INSIDER GUIDES TO SUCCESS IN ACADEMIA
ROUTLEDGE


WRITE
WITHOUT
FEAR
EDIT
WITHOUT
MERCY

36. Authorship: when to use a personal pronoun, 'I/we'

Writing is, at its very core, a form of self-expression,[11] an expression of your thinking. Yet teachers of composition

(3) Concluding well

Conclusions leave the reader with a strong impression. The conclusion generally requires bigging up what you've done. You have to name and claim your original contributions. You have to tell readers what they now know, thanks to your pap
have to write the co
have learnt. The rea
topic, as John Warn

The conclusion is
the place to be a br
assertive note, sho
everything, but you
can't be timid and s
you didn't do that yo
is unimportant. If yo
concluding with suf
mon up a last bit of

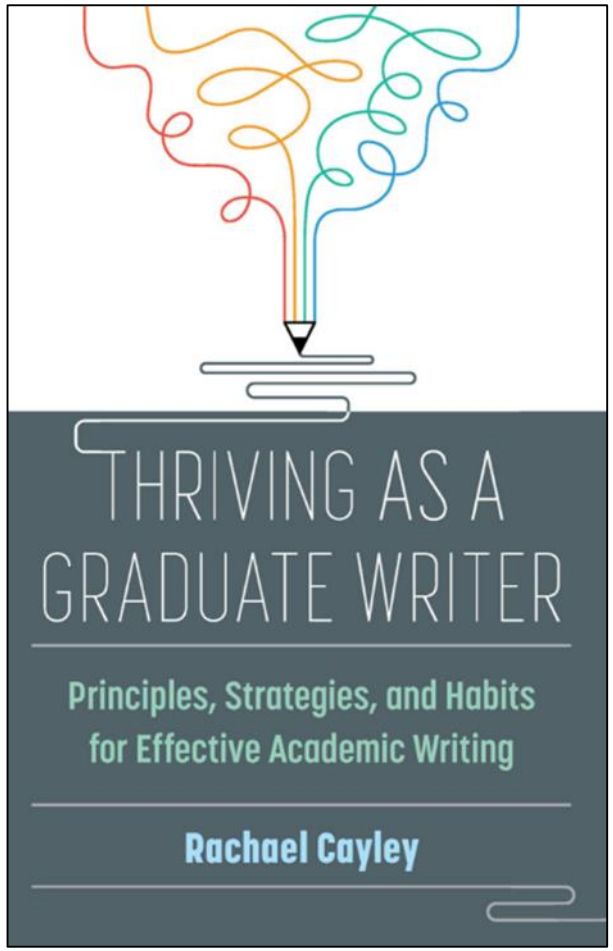
(3) Quotomania

I am not sure who invented the t
excessive use of quotations. While
often suffer from quotomania, exp
on quotations. Expert scholars st
points from others' work. They use
there is no better way of explainin
when they want to give a flavour of a particularly scholarly 'voice' in addition to their own. Overquoting puts the reader off. An encounter with slabs of over-documented, excessively exemplified prose is generally monotonous, dull and hard to read (see Figure 9.5). Unkind readers may assume that the writer has no ideas of their own, and that they are incapable of anything but derivative thought.

(2) Vary sentence length

Academic sentences are often lengthy. The writer makes a point and then adds multiple caveats and embellishments. An academic sentence can go up to 60, even 70 words without flinching.

Academic writers can reasonably expect academic colleagues to stay upright at the occasional lengthy stretch of syntax. They won't rub their eyes and nod off at their desks, even though they might sigh a bit. But too many words and thoughts in a sentence leave the average scholarly reader confused. They can't remember the main point they are meant to be following. The reader-asleep-or-confused problem is exacerbated by nothing *but* long sentences: 70 words followed by another 70 words, followed by . . . halfway through and it's time for a cup of tea.



Writing in Graduate School: Why It Feels So Hard

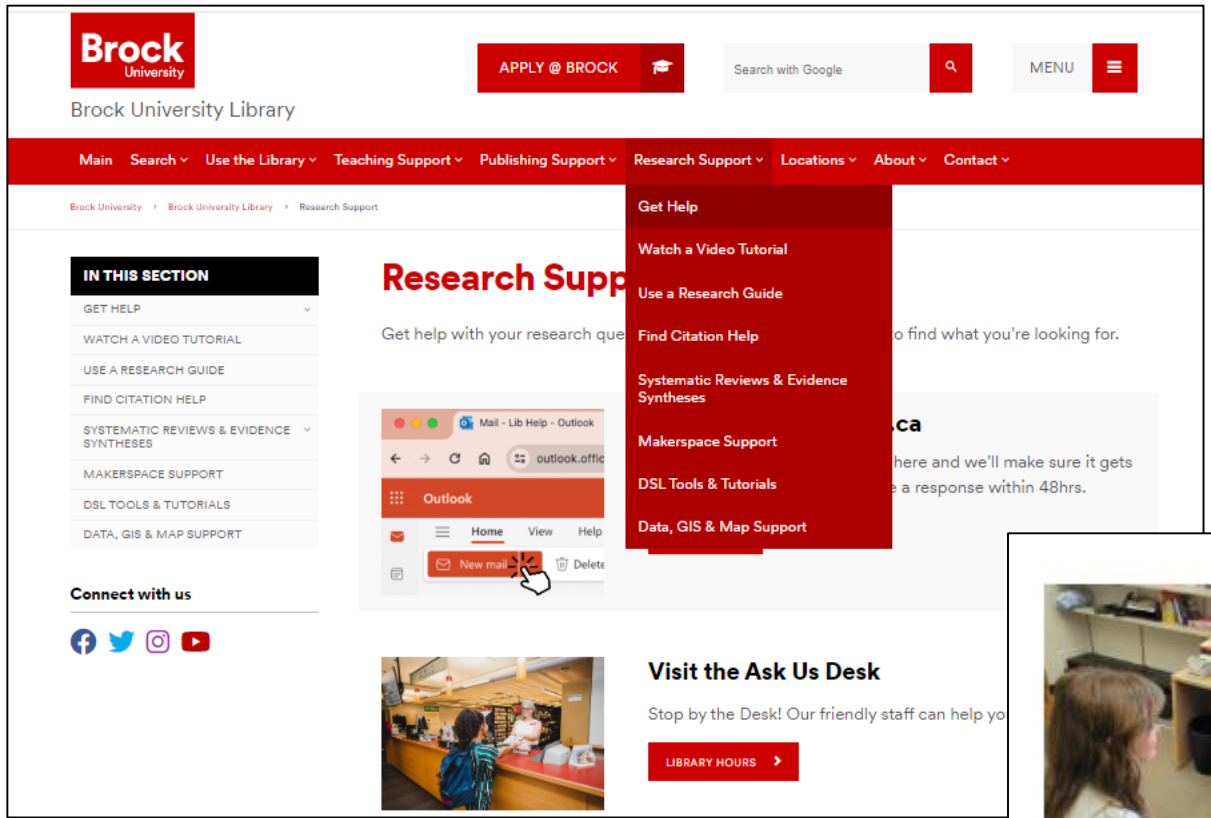
"I feel like I should already know how to write."

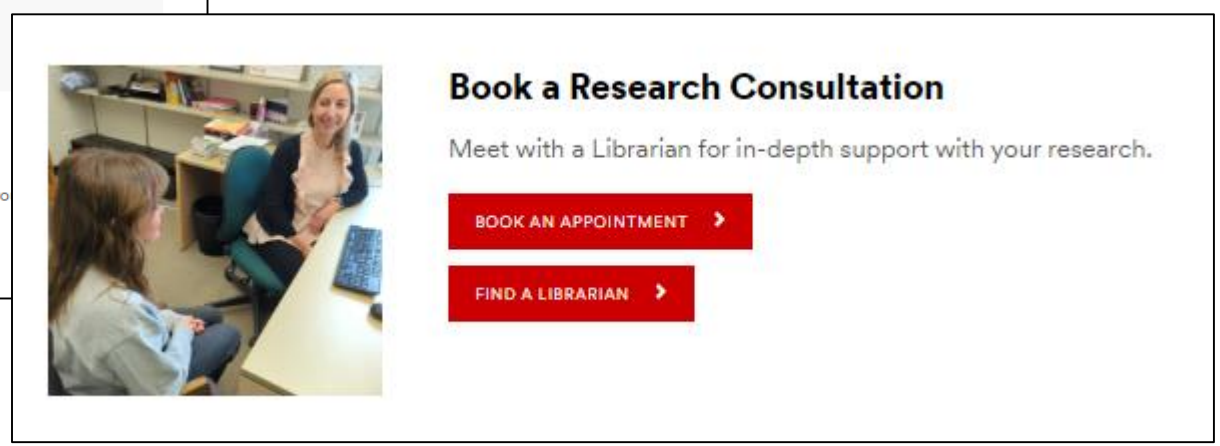
"I feel like my writing difficulties mean I don't belong here."

"I feel like I'm alone in my writing struggles."

"I feel like academic writing can't be done well."

https://brocku.ca/library/research-support/




Book a Research Consultation
Meet with a Librarian for in-depth support with your research.
BOOK AN APPOINTMENT
FIND A LIBRARIAN

Make an Appointment Research Consultation

Your Librarian can help you:

- use the best search tools for your assignments
- find information sources on your specific topic
- develop effective research strategies
- become a confident and independent researcher

1. Select One

Librarian

Research Consultation (30 minutes)

- ○ Justine Cotton
- ◉ Ian Gordon (he/him)
- ○ Jennifer Thiessen
- ○ Elizabeth Yates
- ○ Kymberly Ash
- ○ Vanja Stojanovic

2. Select Date:

Feb 2024

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

3. Select Time:

Tuesday, February 6, 2024

Time Zone: Eastern Time - US & Canada (change)

9:00am | 9:30am | 10:30am

12:30pm | 1:00pm | 3:00pm

3:30pm

Continue

An information-literate individual is able to 'evaluate information and its sources critically, incorporate selected information into one's knowledge base, and use information effectively to accomplish a specific purpose’.

https://www.ala.org/acrl/standards/ilframework

Ian Gordon

Teaching & Learning Librarian
igordon@brocku.ca